

Fiscal Year 2010

PERFORMANCE AND ACCOUNTABILITY REPORT

Financials

Message from the Administrator

November 15, 2010

I am pleased to present NASA's FY 2010 Performance and Accountability Report (PAR). This report documents NASA's progress toward achieving the challenging mission of space exploration, scientific discovery, and aeronautics research as outlined in our Strategic Plan. Further, the performance and financial information presented in this report highlights our efforts to manage taxpayer dollars responsibly, while adhering to NASA's core values of Safety, Integrity, Teamwork, and Excellence.

We are proud of all of our accomplishments this year, and specific information is highlighted and discussed in the *Detailed Performance* Section of this report. However, I would like to mention a few of our specific accomplishments. We had four successful Space Shuttle launches to the International Space Station (ISS) since last November, to complete its construction and outfit it as a scientific facility like no other. The 10th anniversary of humans aboard the station was a true milestone, and we're entering an era where it will reach its true potential as an orbiting laboratory.



Likewise, we were pleased to recognize the 20th anniversary of the launching of the Hubble Space Telescope and to begin seeing new results from the instruments with which it was outfitted on last year's servicing mission. This year, we also marked the 50th anniversary of weather observations from space—a year in which our Earth-observing satellites were also helpful in assessing the status on the ground after disasters such as the Haiti earthquake and the Gulf oil spill. Most recently, a NASA team assisted the Chilean government, through the U. S. Department of State, to provide technical advice that assisted the trapped miners at the San Jose gold and copper mine.

NASA launched the following science missions: Widefield Infrared Survey Explorer (WISE); Solar Dynamics Observatory (SDO); and Geostationary Operational Environmental Satellite (GOES). WISE will scan the entire sky to uncover objects never seen before, helping to answer fundamental questions about the origins of planets, stars, and galaxies. SDO began sending back amazing images of the sun that will help us understand our neighbor and its effects on our planet and our communications systems. In September 2010, the latest Geostationary Operational Environmental Satellite, GOES-15 (also known as GOES-P), was accepted into service. It is designed to watch for storm development and weather conditions on Earth, relay communications, provide search-and-rescue support, and also provide additional capacity for our Nations' weather observing system.

Exploration Systems successfully tested the Ares 1-X for a two-minute powered flight. Results from this test will be helpful in developing the next generation of American spaceflight vehicles that could take humans beyond low-Earth orbit. Our Lunar Reconnaissance Orbiter helped us map the Moon and transform our understanding of it. Aeronautics completed the first phase of the X48-B Low Speed Flight Test Program of a Hybrid wing body aircraft, which is intended to reduce environmental impacts associated with aviation. NASA engineers and scientists tested new rocket motors, moved forward on aviation technologies to make air travel safer and cleaner, and worked with students around the country to help widen the pipeline of future leaders.

In June 2010, NASA launched its Summer of Innovation program, in support of the President's Educate to Innovate campaign for excellence in science, technology, engineering, and mathematics (STEM) education. Our first round of activities gave students in Wyoming, Idaho, Massachusetts, and New Mexico hands-on experience with space missions and science experiments. In FY 2011, we will continue to expand this important work to help develop students' interest in the core STEM disciplines. In addition, NASA awarded cooperative agreements to organizations across the United States to enhance learning through the use of NASA's Earth Science resources. The selected organizations include colleges and universities, nonprofit groups, and community college representatives.

As Administrator, one of my key responsibilities defined in the Space Act of 1958 (as amended) is to "provide for the widest practicable and appropriate dissemination of information concerning (NASA's) activities and the results thereof." As such, NASA embraces the White House's Open Government initiative calling on executive branch agencies to become more open and accountable. From making our open source software development more collaborative to creating a cloud computing platform, or making our social networks easily accessible and conducive to interaction, NASA is taking many steps to implement this openness in all of its activities. Also worthy of note is NASA's successful initiative to fund, track, and report on its accomplishment toward the goals and objectives of the American Recovery and Reinvestment Act (Recovery Act). NASA received \$1,050 million of Recovery Act funding in fiscal year 2009 (\$1,002 million Direct Appropriation and \$48 million Reimbursable Authority), all of which has been obligated on projects to support the Nation's economic recovery and advance NASA's research mission. The Agency received an additional \$4 million in Recovery Act Reimbursable Authority in FY 2010.

Although NASA was unable to achieve the Agency's Strategic Goal to retire the Space Shuttle by the end of FY 2010, the Agency plans to retire the Space Shuttle within the next year. Despite a year of transition and uncertainty, on September 29, 2010, the United States Congress voted resoundingly to endorse a clear path forward for NASA. Drawing on the ambitious plan for our Agency laid out by President Barack Obama, the Congress approved the National Aeronautics and Space Administration Authorization Act of 2010, which was signed by the President on October 11, 2010. This Act helps put the U.S. space program on a more sustainable trajectory that will lead to greater technological capabilities for our Nation, a new commercial space transportation industry, deeper international partnerships, and missions that will help inspire a new generation of Americans. With this new direction, we will also extend the life of the ISS, expand our investments in green aviation, Earth observation and education, and work to create thousands of new jobs in a vibrant, forward-looking economy.

NASA makes every effort to ensure that performance data are subject to the same attention to detail as is devoted to our scientific and technical research. With this in mind, I can provide reasonable assurance that the performance data in this report are reliable and complete. Any data limitations are documented explicitly in the report.

In addition, NASA accepts the responsibility of accounting for and reporting on its financial activities. During FY 2010, NASA resolved the one remaining prior year internal control material weakness. The successful resolution of the prior year material weakness—Controls over Legacy Property, Plant, and Equipment related to valuation of legacy assets—is a result of extensive management involvement across the Agency. This achievement resulted from a sound system of financial controls and adherence to our Comprehensive Compliance Strategy and our Continuous Monitoring Program. In addition, we are now in compliance with the Federal Financial Management Improvement Act. Based on the results of this year's efforts, I am able to provide reasonable assurance that this report's financial data are reliable and complete.

My goal and focus, as NASA Administrator, is to continue to foster NASA as an exceptional resource for this Nation while keeping a sharp eye on our core values. We must always strive to find innovative ways to use NASA's missions to enhance our Nation's educational, scientific, and technological capacity.

Charles F. Bolden, Jr. Administrator

Financials

Message from the Chief Financial Officer		157
Introduction to the Principal Financial Statements		159
Introduction and Limitations to the Financial Statements		159
Consolidated Balance Sheet		160
Consolidated Statement of Net Cost		161
Consolidated Statement of Changes in Net Position		162
Combined Statement of Budgetary Resources		163
Combined Statement of Budgetary Resources		164
Note 1 Summary Of Significant Accounting Policies		165
Note 2 Non-Entity Assets		169
Note 3 Fund Balance With Treasury		170
Note 4 Investments		171
Note 5 Accounts Receivable, Net		172
Note 6 Inventory And Related Property, Net		173
Note 7 Property, Plant, And Equipment, Net (PP&E)		174
Note 8 Stewardship PP&E		176
Note 9 Other Assets		177
Note 10 Liabilities Not Covered By Budgetary Resources		178
Note 11 Environmental And Disposal Liabilities		179
Note 12 Other Liabilities		181
Note 13 Contingent Liabilities		182
Note 14 Intragovernmental Cost And Exchange Revenue		183
Note 15 Apportionment Categories Of Obligations Incurred: Direct vs. Reimbursable Obligations	ations	184
Note 16 Explanation Of Differences Between The Statement Of Budgetary Resources (SBF	,	
and The Budget Of The U.S. Government		
Note 17 Undelivered Orders At The End Of The Period		
Note 18 Reconciliation Of Net Cost To Budget		
Note 19 Other Information		187
Required Supplementary Stewardship Information—Stewardship Investments:		400
Research and Development and Other Initiatives		
Deferred Maintenance		204

Letter from the Inspector General on the Audit
Report of the Independent Auditors
Report on Internal Control Over Financial Reporting Based on an Audit of the Financial Statements Performed in Accordance with <i>Government Auditing Standards</i>
Report on Compliance and Other Matters Based on an Audit of the Financial Statements Performed in Accordance with Government Auditing Standards
Management's Response to Independent Auditor's Report for Fiscal Year 2010

Image, Introduction to the Principal Financial Statements first page (page 159): This SDO close-up of a filament and active region, taken in extreme UV light, shows a dark and elongated filament hovering above the Sun's surface (May 18, 2010). The bright regions beneath it, which show where heating is going on in the magnetic field, send up shafts of plasma that trace magnetic field lines emerging from them. Filaments are cooler clouds of gas that are suspended by tenuous magnetic fields. They are often unstable and commonly erupt. This one is estimated to be at least 60 Earth diameters long (about 500,000 miles). (Credit: NASA/SDO Team)

Message from the Chief Financial Officer

November 15, 2010

The Office of the Chief Financial Officer takes seriously its responsibility for stewardship of the resources entrusted to it and for reporting on the Agency's budget and performance outcomes. This Financials section is the culmination of our efforts to present the Agency's financial status and provide transparency and accountability to the American people. It provides a comprehensive view of the Agency's financial activities undertaken to advance NASA's exploration, space operations, science, aeronautics research, and education missions. It also represents a snapshot of the financial picture resulting from the work performed on a daily basis by NASA finance and budget personnel as we operate across ten centers and multiple locations in the United States and around the world.



I am pleased to report that NASA has made significant progress in financial management during the past year. The independent audit results of the Agency's fiscal year (FY) 2010 financial statements are clear evidence of that progress. The Agency's independent auditors report that, in their opinion, NASA's FY 2010 financial statements present fairly, in all materials respects, the financial position of the Agency as of September 30, 2010, and its budgetary resources for the year then ended, except for the effects of certain FY 2009 adjustments, if any, on the consolidated net cost of operations and consolidated changes in net position.

While the auditor's Report on Internal Control makes it clear that there is room for improvement in controls over Property, Plant, and Equipment (PP&E) records maintained by contractors and continued improvement over the recognition of environmental remediation costs, the progress NASA has made to-date has resulted in the Agency producing financial statements that are auditable and fairly presented, with noted exceptions, for the first time since FY 2002.

This significant accomplishment could only have been achieved through the coordinated efforts of dedicated, hard-working financial and non-financial professionals across the Agency. Most notably, NASA has resolved a long-standing prior year material weakness related to legacy PP&E. Additionally, as a result of successful efforts to integrate property information with the financial accounting system, NASA is now substantially compliant with the Federal Financial Management Improvement Act (FFMIA) for the first time since FY 2000.

In addition to being recognized for its improvements in financial reporting, the Agency has also made continued, measurable and recognized progress toward providing information to the American taxpayer about its programs and performance, recently through the government-wide Open Government initiative. NASA's Open Government Plan received the highest rating of any agency by both the Office of Management and Budget (OMB) and by the

independent group, *OpenTheGovernment.org*. NASA is among a select group of agencies recognized with "The Leading Practices Awards" for achievement above and beyond the requirements of the Open Government directive. NASA is committed to further improving the transparency around how NASA operates and performs, and in support of that commitment we have recently launched the Open Government Status Dashboard to provide the public with the status of individual milestones and goals set forth in our Plan in an easy-to-read format.

Also worthy of note is NASA's successful administration of efforts supported by the American Recovery and Reinvestment Act (Recovery Act). NASA received \$1,050 million of Recovery Act funding in fiscal year 2009, all of which has been obligated on projects to support the Nation's economic recovery and advance NASA's research mission. The Agency received an additional \$4 million in Recovery Act Reimbursable Authority in FY 2010. NASA has fully complied with the Recovery Act, as well as ensuing guidelines from the Office of Management and Budget.

We are pleased with our progress and achievements, and we are committed to addressing the deficiencies noted in the audit report. I appreciate the on-going support of the entire Agency, including our mission programs, mission support offices, and Office of Inspector General, as we continue to work together to achieve financial management excellence.

Dr. Elizabeth Robinson Chief Financial Officer

Introduction to the Principal Financial Statements

Introduction and Limitations to the Financial Statements

The principal financial statements have been prepared to report the financial position and results of operations of the National Aeronautics and Space Administration (NASA), pursuant to the requirements of 31 U.S.C. 3515 (b). While the Statements have been prepared from the books and records of NASA in accordance with Generally Accepted Accounting Principles (GAAP) and the formats prescribed by the Office of Management and Budget (OMB) in Circular No. A-136, Financial Reporting Requirements, the statements are in addition to financial reports prepared by NASA in accordance with OMB and U.S. Department of the Treasury (Treasury) directives to monitor and control the status and use of budgetary resources, which are prepared from the same books and records. The statements should be read with the understanding that they are for a component of the U.S. Government, a sovereign entity. NASA has no authority to pay liabilities not covered by budgetary resources. Liquidation of such liabilities requires enactment of an appropriation. Comparative data for 2009 is included where available. The financial statements, which describe the results of NASA's operations and financial position, are the responsibility of NASA's management. NASA's Principal Financial Statements include the following:

The Consolidated Balance Sheet provides information on assets, liabilities, and net position as of the end of the year, similar to balance sheets reported in the private sector. Assets must equal the sum of liabilities and net position.

The Consolidated Statement of Net Cost reports the components of the net costs of NASA's operations for the period. The net cost of operations consists of the gross cost incurred by NASA less any exchange (i.e., earned) revenue from activities.

The Consolidated Statement of Changes in Net Position reports the beginning net position, the transactions that affect net position for the period, and the ending net position.

The Combined Statement of Budgetary Resources provides information on how budgetary resources were made available and their status for the period. Information in this statement is reported on the budgetary basis of accounting.

Required Supplementary Stewardship Information provides information on NASA's Research and Development and Other Initiatives and Other Initiatives costs.

Required Supplementary Information contains a Combining Statement of Budgetary Resources and information on Deferred Maintenance.

Financial Statements, Notes, and Supplemental Information

National Aeronautics and Space Administration Consolidated Balance Sheet As of September 30, 2010 and 2009

(In Millions of Dollars)

	Audited 2010		Unaudited 2009		
Assets (Note 2):					
Intragovernmental:					
Fund Balance with Treasury (Note 3)	\$	8,601	\$	8,854	
Investments (Note 4)		18		17	
Accounts Receivable (Note 5)		69		216	
Total Intragovernmental		8,688		9,087	
Accounts Receivable, Net (Note 5)		2		2	
Inventory and Related Property, Net (Note 6)				3,019	
Property, Plant and Equipment, Net (Note 7)		9,635		11,577	
Other Assets (Note 9)		3			
Total Assets	\$	18,328	<u> \$ </u>	23,685	
Stewardship PP&E (Note 8)					
Liabilities (Note 10):					
Intragovernmental:					
Accounts Payable	\$	136	\$	130	
Other Liabilities (Note 12)		108		153	
Total Intragovernmental		244		283	
Accounts Payable		1,326		1,254	
Federal Employee and Veteran Benefits		55		57	
Environmental and Disposal Liabilities (Note 11)		1,041		922	
Other Liabilities (Note 12)		1,647		1,633	
Total Liabilities		4,313		4,149	
Commitments and Contingencies (Note 13)					
Net Position:					
Unexpended Appropriations		5,706		6,128	
Cumulative Results of Operations		8,309		13,408	
Total Net Position		14,015		19,536	
Total Liabilities and Net Position	\$	18,328	\$	23,685	

National Aeronautics and Space Administration Consolidated Statement of Net Cost For the Fiscal Years Ended September 30, 2010 and 2009

(In Millions of Dollars)

			dited		Unaudited 2009		
Cost by	Research and Development Initia	ative and Oth	er Initiatives (Note 14):			
Aeronau	ıtics Research						
	Gross Costs	\$	816	\$	828		
	Less: Earned Revenue		119		113		
	Net Costs		697		715		
Explora	tion Systems						
	Gross Costs	\$	5,360	\$	5,153		
	Less: Earned Revenue		62		33		
	Net Costs		5,298		5,120		
Science							
	Gross Costs	\$	6,697	\$	6,606		
	Less: Earned Revenue		649		616		
	Net Costs		6,048		5,990		
Space C)perations						
	Gross Costs	\$	9,694	\$	11,070		
	Less: Earned Revenue		429		428		
	Net Costs		9,265		10,642		
Net Cos	t of Operations						
	Total Gross Costs	\$	22,567	\$	23,657		
	Less: Total Earned Revenue		1,259		1,190		
	Net Cost	\$	21,308	\$	22,467		

National Aeronautics and Space Administration Consolidated Statement of Changes in Net Position For the Fiscal Years Ended September 30, 2010 and 2009

(In Millions of Dollars)

	udited 2010		udited 009
Cumulative Results of Operations:	_		
Beginning Balances	\$ 13,408	\$	16,659
Adjustments:			
Change in Accounting Principle (Note 6)	(3,019)		
Beginning Balances, as adjusted	10,389		16,659
Budgetary Financing Sources:			
Appropriations Used	19,053		18,996
Nonexhange Revenue	9		8
Other Financing Sources:			
Donations and Forfeitures of Property	12		10
Transfers In/Out Without Reimbursement	(2)		57
Imputed Financing	164		151
Other	(8)		(6)
Total Financing Sources	19,228		19,216
Net Cost of Operations	(21,308)		(22,467)
Net Change	 (2,080)		(3,251)
Cumulative Results of Operations	8,309		13,408
Unexpended Appropriations:			
Beginning Balance	6,128		6,389
Budgetary Financing Sources:			
Appropriations Received	18,724		18,784
Other Adjustments	(93)		(49)
Appropriations Used	(19,053)		(18,996)
Total Budgetary Financing Sources	(422)		(261)
Unexpended Appropriations	5,706		6,128
Net Position	\$ 14,015	\$	19,536

National Aeronautics and Space Administration Combined Statement of Budgetary Resources For the Fiscal Years Ended September 30, 2010 and 2009

(In Millions of Dollars)

		udited 2010	Restated Unaudited 2009		
Budgetary Resources:					
Unobligated Balance, Brought Forward, October 1:	\$	1,320	\$	994	
Recoveries of Prior Year Unpaid Obligations		330		328	
Budgetary Authority					
Appropriation		18,725		18,786	
Spending Authority from Offsetting Collections:					
Earned					
Collected		1,475		1,109	
Changed in Receivables from Federal Sources	;	(147)		141	
Change in Unfilled Customer Orders					
Advance Received		(87)		27	
Without Advance from Federal Sources		(14)		165	
Subtotal		19,952		20,228	
Permanently Not Available					
Cancellations of Expired and No-year Accounts		(93)		(49)	
Total Budgetary Resources	\$	21,509	<u> </u>	21,501	
Status of Budgetary Resources:					
Obligations Incurred (Note 15):					
Direct	\$	19,413	\$	18,706	
Reimbursable		1,481		1,475	
Subtotal		20,894		20,181	
Unobligated Balance:					
Apportioned		459		1,130	
Unobligated Balance Not Available		156		190	
Total Status of Budgetary Resources	\$	21,509	\$	21,501	

National Aeronautics and Space Administration Combined Statement of Budgetary Resources For the Fiscal Years Ended September 30, 2010 and 2009

(In Millions of Dollars)

		dited 010	Restated Unaudited 2009		
Change in Obligated Balance:					
Obligated Balances, Net					
Unpaid Obligations Brought Forward, October 1	\$	8,516	\$	8,975	
Less: Uncollected Customer Payments from					
Federal Sources, Brought Forward, October 1		983		676	
Total Unpaid Obligated Balances, Net		7,533		8,299	
Obligations Incurred		20,894		20,181	
Less: Gross Outlays		20,301		20,313	
Less: Recoveries of Prior Year Unpaid Obligations, Actual		330		328	
Change in Uncollected Customer Payments from					
Federal Sources		161		(306)	
	\$	7,957	\$	7,533	
Obligated Balance, Net, End of Period					
Unpaid Obligations	\$	8,779	\$	8,516	
Less: Uncollected Customer Payments from					
Federal Sources		822		983	
Total, Unpaid Obligated Balance, Net, End of Period	<u> </u>	7,957	\$	7,533	
Net Outlays:					
Net Outlays					
Gross Outlays	\$	20,301	\$	20,313	
Less: Offsetting Collections		1,388		1,136	
Less: Distributed Offsetting Receipts		8		8	
Net Outlays	\$	18,905	\$	19,169	

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting Entity

The National Aeronautics and Space Administration (NASA) is an independent Agency established by Congress on October 1, 1958 by the National Aeronautics and Space Act of 1958. NASA was incorporated from the Agency's predecessor organization, the National Advisory Committee for Aeronautics, which provided technical advice to the United States (U.S.) aviation industry and performed aeronautics research. Today, NASA serves as the fulcrum for initiatives by the United States in civil space and aviation.

NASA is organized into four Research and Development and Other Initiatives (R&D/Other) which focus on the following objectives:

- Aeronautics Research: conducting research which will significantly enhance aircraft performance, environmental compatibility, and safety, and will enhance the capacity, flexibility, and safety of the future air transportation system;
- Exploration Systems: creating new capabilities, supporting technologies and foundational research for affordable, sustainable human and robotic exploration;
- Science: exploring the Earth, Moon, Mars, and beyond; charting the best route of discovery, and reaping the benefits of Earth and space exploration for society; and
- Space Operations: providing critical enabling technologies for much of the rest of NASA through the Space Shuttle, the International Space Station, and flight support.

NASA's structure includes a Strategic Management Council, a Mission Support Council, and a Program Management Council to integrate NASA's strategic, tactical and operational decisions, and a number of other committees supporting NASA's focus and direction. The organizational structure is designed to position NASA to implement the Vision for Space Exploration.

The nine NASA Centers, NASA Headquarters, and the Jet Propulsion Laboratory carry out the activities of NASA. The Jet Propulsion Laboratory is a federally funded Research and Development center owned by NASA but managed by an independent contractor.

The accompanying financial statements of NASA include the accounts of all funds which have been established and maintained to account for the resources under the control of NASA management.

Basis of Accounting and Presentation

These consolidated financial statements are prepared in accordance with generally accepted accounting principles (GAAP) in the United States of America and standards as promulgated by the Federal Accounting Standards Advisory Board (FASAB) and the Office of Management and Budget (OMB) Circular No. A-136, Financial Reporting Requirements, Revised (September 2010). FASAB is recognized by the American Institute of Certified Public Accountants (AICPA) as the official accounting standards-setting body for United States government entities. The statements present the financial position, net cost of operations, changes in net position, and budgetary resources of NASA, as required by the Chief Financial Officers Act of 1990, Public Law (P.L.) 101-576, and the Government Management Reform Act (P.L. 101-356).

The financial statements should be read with the realization they are a component of the U.S. government, a sovereign entity. One implication of this is that liabilities cannot be liquidated without legislation providing resources and legal authority to do so. The accounting structure of Federal agencies is designed to reflect both accrual and budgetary accounting transactions. Under the accrual method of accounting, revenues are recognized when earned and expenses are recognized when a liability is incurred, without regard to receipt or payment of cash. Budgetary accounting facilitates compliance with legal constraints and controls over the use of Federal funds.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Budgets and Budgetary Accounting

NASA follows standard Federal budgetary accounting policies and practices in accordance with OMB Circular No. A-11, Preparation Submission and Execution of the Budget. To accomplish the goals of NASA's R&D/other initiatives Congress funds NASA through eight main appropriations: Science, Aeronautics, Exploration, Space Operations, Education, Cross-NASA Support, Inspector General, and Construction and Environmental Compliance and Remediation. In 2009, NASA also received funding under the American Recovery and Reinvestment Act of 2009 through five appropriations: Science Recovery Act, Aeronautics Recovery Act, Exploration Recovery Act, Cross-Agency Support Recovery Act and Inspector General Recovery Act. Reimbursements to NASA are used to fund agreements between NASA and other Federal entities or the Public. As part of its reimbursable program, NASA launches devices into space and provides tracking and data relay services for the U.S. Department of Defense and the Department of Commerce (National Oceanic and Atmospheric Administration).

Research and Development, Other Initiatives and Similar Costs

NASA makes substantial R&D investments for the benefit of the United States. NASA's R&D programs include activities to extend our knowledge of Earth, its space environment, and the universe; and to invest in new aeronautics and advanced space transportation technologies supporting the development and application of technologies critical to the economic, scientific, and technical competitiveness of the United States. Accordingly, NASA applies the Financial Accounting Standards Board's (FASB) Accounting Standards Codification (ASC) 730-10-25, Research and Development - Recognition, and FASB ASC 730-10-50 Research and Development - Disclosure, to its R&D projects.

Use of Estimates

The preparation of financial statements requires management to make estimates and assumptions affecting the reported amounts of assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

NASA requires major contractors to provide an estimate of their anticipated billing prior to their sending the actual invoice. In addition, NASA requires the contractors to provide an estimate for the next month's anticipated work. When NASA receives these estimates they are compared to the contract under which the work is performed. If the estimate exceeds a specified funding line item, the program manager and the procurement official, as necessary, review the estimate prior to posting in the general ledger as an estimated liability. If the review is not completed within the timeframe for quarterly or yearly reporting, NASA uses the estimates of activity through the current period to establish an estimated liability. However, in this instance NASA fully recognizes that "no agency has the authority to pay liabilities not covered by budgetary resources." Liability to the contractor is not established by receipt of these estimates, but only when accepted by NASA.

Fund Balance with Treasury

Fund Balance with Treasury (FBWT) represents NASA's funds held on deposit with the U.S. Treasury that are available to pay liabilities. NASA's FBWT balance is comprised in general funds, trust funds, and other types of funds.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Investments in U.S. Government Securities

Investments include the following Intragovernmental non-marketable securities:

- (1) National Aeronautics and Space Administration Endeavor Teacher Fellowship Trust Fund established from public donations in tribute to the crew of the Space Shuttle Challenger
- (2) Science, Space and Technology Education (Challenger) Trust Fund established for programs to improve science and technology education

The Endeavor Trust Fund balance is invested in short-term bills, while the Challenger Trust Fund balance is invested in short-term bills and long-term bonds. P.L. 100-404 requires that a quarterly payment of \$250,000 is sent to the Challenger Center from interest earned on the Challenger investments. In order to meet the requirement of providing funds to the Challenger Center, NASA invests the bi-annual interest earned in short-term bills that mature in order to provide \$250,000 at the end of every quarter. Any interest received and not needed for the quarterly payment to the Challenger Center is invested in a bond maturing on February 15, 2019.

P.L. 102-195 requires the interest earned from the Endeavor investments be used to create the Endeavor Teacher Fellowship Program; however, there have been no funds obligated for this purpose to date.

Accounts Receivable

The majority of NASA's receivables are for intra-governmental reimbursements of R&D costs related to satellites and launch services. A small portion of NASA accounts receivable are debts to NASA by non-Federal government entities. Allowances for doubtful non-Federal accounts are based on factors such as, aging of accounts receivable, debtors' ability to pay, payment history, and other relevant factors. Also, doubtful non-Federal debts over 180 days are referred to the Treasury Department for collection or cross-servicing. Under the cross-servicing program, Treasury can withhold payments due from Treasury to a non-Federal debtor to the extent of debt owed to the Federal government.

Inventory and Related Property

NASA does not maintain inventory stock for resale. NASA follows the purchases method of accounting for operating materials and supplies. The consumption method is not cost beneficial and does not provide the best presentation of NASA's R&D operations. The purchases method provides that operating materials and supplies be expensed when purchased. Prior to FY 2010, amounts displayed as operating materials and supplies were accounted for under the consumption method. In FY 2010, NASA adopted a change in accounting principle and implemented the purchases method of accounting. See Note 6.

Property, Plant and Equipment

NASA reports depreciation expense using the straight-line method, beginning with the month the asset is placed into service. Property with a unit cost of \$100,000 or more, a useful life of 2 years or more, and an alternative future use is capitalized. Capitalized costs include costs incurred by NASA to bring the property to a form and location suitable for its intended use. Under provisions of the Federal Acquisition Regulation (FAR), contractors are responsible for control and accountability for Government-owned property in their possession.

NASA has barter agreements with international entities including the European Space Agency and the National Space Agency of Japan, related largely to the International Space Station. The intergovernmental agreements state that the parties will seek to minimize the exchange of funds in the cooperative program, including the use of barters to provide goods and services. As of September 30, 2010, NASA has received some assets from these parties in exchange for future services. The fair value is indeterminable; therefore, no value was ascribed to these transactions in accordance with FASB ASC 845-10-25 Non-Monetary Transactions – Recognition and ASC 845-10-50 Non-Monetary Transactions –Disclosure. The amounts reflected in NASA's financial reports for the ISS exclude components of the ISS owned or provided by other participants in the ISS.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Property, Plant and Equipment (continued)

In FY 2010, NASA adopted Statement of Federal Financial Accounting Standards (SFFAS) No. 35, Estimating the Historical Cost of General Property, Plant and Equipment (PP&E). Accordingly, in those circumstances when original historical cost information is not readily available, NASA uses reasonable estimates of original historical cost to value PP&E balances. SFFAS No. 35 was applied to the International Space Station and Real Property assets in service as of FY 2010, none of which required adjustments to recorded balances.

Capitalized costs for internally developed software include the full costs (direct and indirect) incurred during the software development stage only. For purchased software, capitalized costs include amounts paid to vendors for the software and material internal costs incurred by NASA to implement and make the software ready for use through acceptance testing. When NASA purchases software as part of a package of products and services (for example: training, maintenance, data conversion, reengineering, site licenses, and rights to future upgrades and enhancements), capitalized and non-capitalized costs of the package are allocated among individual elements on the basis of a reasonable estimate of their relative fair market values. Costs not susceptible to allocation between maintenance and relatively minor enhancements are expensed.

NASA capitalizes costs for internal use software when the total projected cost is \$1 million or more and the expected useful life of the software is 5 years or more.

Liabilities Covered by Budgetary Resources

Liabilities covered by budgetary resources are liabilities covered by realized budgetary resources as of the balance sheet date. Realized budgetary resources include new budget authority, unobligated balances of budgetary resources at the beginning of the year, and spending authority from offsetting collections. Examples include accounts payable and salaries.

Liabilities and Contingencies Not Covered by Budgetary Resources

Generally liabilities not covered by budgetary resources are liabilities for which congressional action is needed before budgetary resources can be provided. Liabilities not covered by budgetary resources include certain environmental matters, legal claims, pensions and other retirement benefits, workers' compensation, annual leave, and closed appropriations.

Federal Employee and Veterans' Benefits

A liability was recorded for workers' compensation claims related to the Federal Employees' Compensation Act (FECA), administered by the U.S. Department of Labor. The FECA provides income and medical cost protection to covered Federal civilian employees injured on the job, employees who have incurred a work-related occupational disease, and beneficiaries of employees whose death is attributable to a job-related injury or occupational disease. The FECA program initially pays valid claims and subsequently seeks reimbursement from the Federal agencies employing the claimants.

The FECA liability includes the actuarial liability for estimated future costs of death benefits, workers' compensation, and medical and miscellaneous costs for approved compensation cases. This liability is reported on the Federal Employee and Veteran Benefits line on the balance sheet. The present value of these estimates at year-end was calculated by the Department of Labor using a discount rate of 3.65% in FY 2010 and 4.22% in FY 2009. This liability includes the estimated future costs for claims incurred but not reported or approved as of the end of each year.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Personnel Compensation and Benefits

Annual Sick and Other Leave

Annual leave is accrued as it is earned; the accrual is reduced as leave is taken. Each year, the balance in the accrued annual leave account is adjusted to reflect current pay rates. To the extent current or prior year appropriations are not available to fund annual leave earned but not taken, funding will be obtained from future financing sources. Sick leave and other types of non-vested leave are expensed as taken.

Retirement Benefits

NASA employees participate in the Civil Service Retirement System (CSRS), a defined benefit plan, or the Federal Employees Retirement System (FERS), a defined benefit and contribution plan. For CSRS employees, NASA makes contributions of 7.0 percent of pay. For FERS employees, NASA makes contributions of 11.2 percent to the defined benefit plan, contributes 1 percent of pay to a retirement saving plan (contribution plan), and matches employee contributions up to an additional 4 percent of pay. For FERS employees, NASA also contributes to employer's matching share for Social Security taxes.

Insurance Benefits

The FASAB's SFFAS No. 5, Accounting for Liabilities of the Federal Government, requires Government agencies to report the full cost of Federal Employee Health Benefits (FEHB), and the Federal Employees Group Life Insurance (FEGLI) Programs. NASA uses the applicable cost factors and imputed financing sources provided by the Office of Personnel and Management to value these liabilities.

Other

Certain FY 2009 amounts have been restated due to subsequent OMB guidance on the reporting of offsetting receipts.

NOTE 2. NON-ENTITY ASSETS

The majority of NASA's assets are considered entity assets. The balance of non-entity assets was not significant at September 30, 2010 and 2009.

NOTE 3. FUND BALANCE WITH TREASURY

Fund Balance with Treasury (FBWT) represents the aggregate amount of the NASA's funds held on deposit with the U.S. Treasury that are available to pay liabilities. NASA's FBWT balance is comprised in general funds, trust funds, and other types of funds. General Funds primarily consists of appropriated funds for NASA. Trust Funds include balances in Endeavor Teacher Fellowship; National Space Grant Program; Science, Space and Technology Education; and Gifts and Donations. Other Fund types include Working Capital Fund; Fines, Penalties, and Forfeitures; General Fund Proprietary Interest; Collections of Receivables from Canceled Appropriations; General Fund Proprietary Receipts; Budget Clearing and Suspense; Unavailable Check Cancellation; Undistributed Intragovernmental Payment; State and Local Taxes; Other Payroll; and U.S. Employee Allotment Account, Savings Bonds.

(In Millions of Dollars)		010	2009
Fund Balances:			
General Funds	\$	8,533	\$ 8,801
Trust Funds		3	4
Other Fund Types		65	49
Total	\$	8,601	\$ 8,854

The status of Fund Balance with Treasury is the total fund balance as recorded in the general ledger for unobligated and obligated balances. Unobligated Balances - Available is the amount remaining in appropriation accounts available for obligation in future fiscal years. Unobligated Balances - Unavailable is the amount remaining in appropriation accounts used only for adjustments to previously recorded obligations. Obligated Balances - Not Yet Disbursed is the cumulative amount of obligations incurred for which outlays have not been made. Non-budgetary FBWT is comprised of amounts in other fund types.

(In Millions of Dollars)	2	010	2009		
Status of Fund Balances with Treasury:					
Unobligated Balances					
Available	\$	459	\$	1,130	
Unavailable		156		190	
Obligated Balance Not Yet Distributed		7,957		7,533	
Non- Budgetary FBWT		29		1	
Total	\$	8,601	\$	8,854	

NOTE 4. INVESTMENTS

NASA's investments consist of non-marketable par value intragovernmental securities issued by Treasury's Bureau of the Public Debt. The trust fund balances are invested in Treasury securities, which are purchased at either a premium or discount, and redeemed at par value exclusively through Treasury's Federal Investment Branch. The effective-interest method was utilized to amortize premiums on bonds, and the straight-line method was utilized to amortize discounts on bills.

NASA has Interest Receivable just below the displayable threshold of a million dollars. In addition, NASA did not have any adjustments resulting from the sale of securities prior to maturity or any change in value that is more than temporary.

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				2010)							
(In Millions of Dollars)	Cost	Amoritization Method		Amoritzed (Premium) Discount		Interest Receivable		Investments,		Other Adjustments		Market Value Disclo- sure
Intragovernmental		Straight-Line										
Securities: Non- Marketable: Par value	\$19	Effective-interest 0.155 - 6.602%	\$	(1)	Ф		\$	18	\$		\$	18
Fai value	Φ19	0.133 - 0.002%	Φ	(1)	Φ		Φ	10	Φ		Φ	10
Total	\$19		\$	(1)	\$		\$	18	\$		\$	18
				2009)							
(In Millions of Dollars)	Cost	Amoritization Method		Amoritzed (Premium) Discount		Interest Receivable		Investments,		Other Adjustments		Market Value Disclo- sure
Intragovernmental	0000	Straight-Line		Diocount		110001140010		1100		rajaotinonto		Caro
Securities:		3										
Non-Marketable:		Effective-interest										
Par value	\$18	0.185 - 6.602%	\$	(1)	\$		\$	17	\$		\$	17
Total	\$18		\$	(1)	\$		\$	17	\$		\$	17

NOTE 5. ACCOUNTS RECEIVABLE, NET

The Accounts Receivable balance represents net valid claims by NASA to cash or other assets of another entity. Intragovernmental Accounts Receivable represents reimbursements due from other Federal entities for goods and services provided by NASA on a reimbursable basis. Accounts Receivable Due from the Public is the total of miscellaneous debts due to NASA from employees and/or smaller reimbursements from other non-Federal entities. A periodic evaluation of public accounts receivable is performed to estimate any uncollectible amounts based on current status, financial and other relevant characteristics of debtors, and the overall relationship with the debtor. An allowance for doubtful accounts is recorded, for Accounts Receivable Due from the Public, in order to bring Accounts Receivable to its Net Realizable Value in accordance with SFFAS No. 1, Accounting for Selected Assets and Liabilities. The total allowance for doubtful accounts during both FY 2009 and FY 2010 was less than \$500 thousand.

			2	010		
			Allow	vance for		
	Acc	ounts	Unco	ollectible	Net A	Amount
(In Millions of Dollars)	Rece	eivable	Ac	counts		Due
Intragovernmental	\$	69	\$		\$	69
Public		2				2
Total	\$	71	\$		\$	71
				2009 vance for		
	Accounts		Uncollectible			Amount
(In Millions of Dollars)	Rece	eivable	Ac	counts		Due
Intragovernmental	\$	216	\$		\$	216
Public		2				2
	\$					

NOTE 6. INVENTORY AND RELATED PROPERTY, NET

The decrease in Inventory and Related Property is due to a change in accounting principle in FY 2010. In FY2009 and prior, NASA accounted for Operating Materials and Supplies (OM&S) using the consumption method. In FY 2010, NASA reviewed the consumption method in relation to its business processes and operations and determined that it did not reflect NASA's business processes and operations and that the purchases method explained in SFFAS No. 3, Accounting for Inventory and Related Property, is the preferred method.

SFFAS No. 21, Reporting Corrections of Errors and Changes in Accounting Principles, states that the cumulative effect of the change on prior periods should be reported as a change in accounting principle. Accordingly, NASA adjusted the beginning balance of the cumulative results of operations in the Statement of Changes in Net Position by \$3,019 million.

(In Millions of Dollars)	2	2010	2009
Operating Materials and Supplies			
Items Held for Use	\$		\$ 3,016
Items Held in Reserve for Future Use			3
Total	\$		\$ 3,019

NOTE 7. PROPERTY, PLANT, AND EQUIPMENT, NET (PP&E)

Property, plant and equipment is depreciated using the straight-line method, beginning with the month the asset is placed into service. Property with a unit cost of \$100,000 or more and a useful life of 2 years or more and an alternative future use is capitalized. Capitalized costs include costs incurred to bring the property to a form and location suitable for its intended use. Under provisions of the Federal Acquisition Regulation (FAR), contractors are responsible for control and accountability of Government-owned property in their possession.

NASA began depreciating the International Space Station in Fiscal Year (FY) 2001 when manned by the first permanent crew. Only the Station's major elements in space, which represents US owned hardware components that are delivered and installed on-orbit, are depreciated; any on-ground elements are reported as Assets Under Construction (AUC) until launched and incorporated into the existing Station structure.

In FY 2010, NASA adopted SFFAS No. 35, Estimating the Historical Cost of General Property, Plant and Equipment (PP&E). Accordingly, in those instances when original historical cost information is not readily available, NASA uses reasonable estimates of original transaction data historical cost to value PP&E balances.

Certain items in FY 2009 have been reclassified from Space Shuttle to Institutional Equipment for comparability purposes as these items support multiple NASA projects.

NOTE 7. PROPERTY, PLANT, AND EQUIPMENT, NET (PP&E) (CONTINUED)

	Depreciation			Accumulated	
(In Millions of Dollars)	Method	Useful Life	Cost	Depreciation	Book Value
Space Exploration PP&E					
International Space Station	Straight-line	5 - 20 years	\$ 12,584	\$ (6,312)	\$ 6,272
Space Shuttle	Straight-line	5 - 20 years	8,468	(8,468)	
Assets Under Construction		N/A	316	==	316
Work-in-Process- Equipment		N/A			
Total			21,368	(14,780)	6,588
General PP&E					
Land			123		123
Structures, Facilities and Leasehold					
Improvements	Straight-line	15 - 40 years	8,044	(6,165)	1,879
Institutional Equipment	Straight-line	5 - 20 years	1,312	(1,040)	272
Construction in Process		N/A	715		715
Internal Use Software and Development	Straight-line	5 years	223	(165)	58
Total			10,417	(7,370)	3,047
Total Property, Plant, and Equipment			\$ 31,785	\$ (22,150)	\$ 9,635

Restated 2009

	Depreciated			Accumulated	
(In Millions of Dollars)	Method	Useful Life	Cost	Depreciation	Book Value
Space Exploration PP&E					
International Space Station	Straight-line	5 - 20 years	\$ 11,456	\$ (5,758)	\$ 5,698
Space Shuttle	Straight-line	5- 20 years	8,889	(8,379)	510
Assets Under Construction		N/A	1,303		1,303
Work-in-Process - Equipment		N/A	1,180		1,180
Total			22,828	(14,137)	8,691
General PP&E					
Land			122		122
Structures, Facilities and Leasehold					
Improvements	Straight-line	15 - 40 years	7,790	(5,942)	1,848
Institutional Equipment	Straight-line	5 - 20 years	1,425	(1,093)	332
Construction in Process		N/A	506		506
Internal Use Software and Development	Straight-line	5 years	219	(141)	78
Total			10,062	(7,176)	2,886
Total Property, Plant, and Equipment			\$ 32,890	\$ (21,313)	\$ 11,577

NOTE 8. STEWARDSHIP PP&E

Federal agencies are required to classify and report heritage assets in accordance with SFFAS No. 29, Heritage Assets and Stewardship Land.

Stewardship PP&E have physical characteristics similar to those of general PP&E (G-PP&E) but differ from G-PP&E because their value is more intrinsic and not easily determinable in dollars. The only type of stewardship PP&E owned by NASA are Heritage Assets.

Heritage Assets are PP&E which possess one or more of the following characteristics:

- Historical or natural significance;
- Cultural, educational, or aesthetic value, or
- Significant architectural characteristics.

Dollar value and useful life of heritage assets are not easily determinable. There is no minimum dollar threshold for designating a PP&E as heritage asset, and depreciation expense is not taken on these assets.

NASA's heritage assets include buildings and structures designated as National Historic Landmarks, as well as air and spacecraft and related components on display to enhance public understanding of NASA programs. The most important attribute of heritage assets is their existence. NASA reports these assets in physical units, as follows.

	2009	Additions	Withdrawals	2010
Buildings and Structures	12	5	1	16
Air and Space Displays and Artifacts	523	20	18	525
Art and Miscellaneous Items	1,014	6	1_	1,019
Total Heritage Assets	1,549	31	20	1,560
	2008	Additions	Withdrawals	2009
Buildings and Structures	18		6	12
Air and Space Displays and Artifacts	521	8	6	523
Art and Miscellaneous Items	1,015		1_	1,014
Total Heritage Assets	1,554	8	13	1,549

When a G-PP&E is designated as heritage asset, its cost and accumulated depreciation are removed from the books. Heritage assets are generally in fair condition suitable for display. They remain on the record as heritage assets, except where there is legal authority for transfer or sale. However, they are withdrawn when they become inactive or reclassified as multi-use heritage assets.

For more than 30 years, the NASA Art Program has documented America's major accomplishments in aeronautics and space. During that time, artists have generously contributed their time and talent to record their impressions of the U.S. Aerospace Program in paintings, drawings, and other media. Not only do these art works provide a historic record of NASA projects, they give the public a new and fuller understanding of advancements in aerospace. Artists give a special view of NASA through the back door. Some have witnessed astronauts in training or scientists at work. The art collection, as a whole, depicts a wide range of subjects, from Space Shuttle launches to aeronautics research, Hubble Space Telescope, and even virtual reality.

NOTE 8. STEWARDSHIP PP&E (CONTINUED)

Artists commissioned by NASA receive a small honorarium in exchange for donating a minimum of one piece to the NASA archive. In addition, more works have been donated to the National Air and Space Museum.

In accordance with SFFAS No. 29, the cost of acquisition, improvement, reconstruction, or renovation of heritage assets is expensed in the period incurred.

In accordance with SFFAS No. 29, heritage assets that are used in day-to-day government operations are considered "multi-use" heritage assets that are not used for heritage purposes. Such assets are accounted for as general property, plant, and equipment and are capitalized and depreciated in the same manner as other general property, plant, and equipment. For FY 2010, NASA had 89 buildings, structures, and equipment that are considered to be multi-use heritage assets. The values of these assets are included in the property, plant, and equipment values shown in the Financial Statements.

NOTE 9. OTHER ASSETS

The Other Assets balance represents general PP&E assets that NASA determines are no longer needed and are awaiting disposal, retirement, or removal from services. These amounts are recorded at estimated net realizable value

(In Millions of Dollars)	2010		2009
Other			
Pending Disposal	\$ 3	\$	
Total	\$ 3	\$	

NOTE 10. LIABILITIES NOT COVERED BY BUDGETARY RESOURCES

Liabilities not covered by budgetary resources are liabilities for which congressional action is needed before budgetary resources can be provided. They include certain environmental matters (Note 11, Environmental and Disposal Liabilities), legal claims, pensions and other retirement benefits, workers' compensation, annual leave, and closed appropriations.

NASA has recorded Accounts Payable related to closed appropriations for which there are contractual commitments to pay. These payables will be funded from appropriations available for obligation at the time a bill is processed, in accordance with P.L. 101-510, National Defense Authorization Act.

(In Millions of Dollars)	2010	2009
Intragovernment Liabilities:		
Other Liabilities		
Workers' Compensation	\$ 13	\$ 14
Accounts Payable for Closed Appropriations	 3	8
Total Intragovernmental	16	22
Public Liabilities:		
Accounts Payable		
Accounts Payable for Closed Appropriations	35	34
Federal Employee and Veterans Benefits		
Actuarial FECA Liability	55	57
Environmental and Disposal Liabilities	1,041	922
Other Liabilities		
Unfunded Annual Leave	213	208
Total Liabilities Not Covered by Budgetary Resources	1,360	1,243
Total Liabilities Covered by Budgetary Resources	 2,953	 2,906
Total Liabilities	\$ 4,313	\$ 4,149

NOTE 11. ENVIRONMENTAL AND DISPOSAL LIABILITIES

(In Millions of Dollars)	2010	2009
Probable		
Known Hazardous Conditions	\$ 893	\$ 812
Anticipated Cleanup at Disposal: Space Shuttle	132	110
Anticipated Cleanup at Disposal: Other PP&E	16	
Total	\$ 1,041	\$ 922
Reasonably Possible		
Known Hazardous Conditions	\$ 116	\$ 17
Anticipated Cleanup at Disposal: Space Shuttle	46	54
Anticipated Cleanup at Disposal: Other PP&E		7 - 19
Total	\$ 162	\$ 78 - 90

Environmental and Disposal Liabilities represents cleanup costs resulting from:

- Operations that include facilities obtained from other governmental entities that have resulted in contamination from waste disposal methods, leaks and spills;
 - Other past activity that created a public health or environmental risk, or
- Total cleanup costs associated with the removal, containment, and/or disposal of hazardous wastes or material and/or property that have been deferred until operation of associated property, plant, and equipment (PP&E) ceases either permanently or temporarily.

Federal, State, and local statutes and regulations require environmental cleanup. Some of these statutes include: the Comprehensive Environmental Response, Compensation, and Liability Act; the Resource Conservation and Recovery Act; the Nuclear Waste Policy Act of 1982; as well as State and local laws.

NASA assesses the likelihood of required cleanup as probable, reasonably possible or remote. If the likelihood of required cleanup is probable and the cost can be reasonably estimated, a liability is recorded in the financial statements. If the likelihood of required cleanup is reasonably possible, the estimated cost of cleanup is disclosed in the notes to the financial statements. If the likelihood of required cleanup is remote, no liability is recorded or estimate disclosed.

If site-specific engineering estimates for cleanup are not available, NASA employs parametric modeling software to estimate the total cost of cleaning up known contamination at these sites for current and future years. The estimates calculated by the parametric models may be classified as probable or reasonably possible.

Consistent with SFFAS No. 6, Accounting for Property, Plant, and Equipment, NASA estimates the anticipated environmental disposal cleanup costs for current and planned capital PP&E. NASA recognizes and records in its financial statements an environmental cleanup liability for those in-service PP&E with a probable and measurable environmental cleanup liability of \$100,000 or more.

Probable Environmental and Disposal Liabilities

In FY 2010, NASA recorded an additional \$119 million dollars of environmental and disposal liabilities to reflect the estimated total cost of environmental cleanup on known hazardous conditions bringing the total to \$1,041 million which includes anticipated cleanup at disposal for Space Shuttle and PP&E. The amount recorded in FY 2009 was \$922 million. The increase is due to changes in individual project estimates and additional liabilities from disposal-related cleanup costs for PP&E. During FY 2010, NASA engaged an independent consultant to inventory all PP&E of permitted facilities through FY 2009, in accordance with its stated policy. This report was the primary basis for the Other PP&E decommissioning and clean up cost reported above.

NOTE 11. ENVIRONMENTAL AND DISPOSAL LIABILITIES (CONTINUED)

The estimate for unfunded environmental liabilities could change in the future due to identification of additional contamination, inflation, deflation, a change in technology or applicable laws and regulations as well as through ordinary liquidation of these liabilities as the cleanup program continues into the future. Estimates change primarily due to updated information being available on the extent of contamination and remediation efforts that would be required.

Reasonably Possible Environmental and Disposal Liabilities

In addition to the probable cleanup costs for known hazardous conditions recognized in the financial statements, there are other potential remediation sites where the likelihood of required cleanup for known hazardous conditions is reasonably possible. FY 2010 remediation costs at certain sites classified as reasonably possible were estimated to be \$162 million dollars. In FY 2009, these remediation costs were estimated between \$78 million and \$90 million.

The costs necessary to cleanup Space Shuttle equipment for museum display are expected to be the responsibility of the institution displaying the equipment. If NASA is required to incur those costs, NASA estimated \$46 million of Space Shuttle disposal costs (for the periods FY 2013 through FY 2016) as reasonably possible. Consistent with NASA's approach described above, this reasonably possible estimate is not recorded but is disclosed in the financial statements.

With respect to environmental remediation that NASA believes is reasonably possible but not estimable, NASA believes that either the likelihood of NASA liability is less than probable but more than remote or the regulatory drivers and/or technical data that exist are not reliable enough to calculate an estimate.

The ISS is designed and planned to be de-orbited over the Pacific Ocean. The ISS will be destroyed during reentry. Accordingly, no end-of-life environmental liability is anticipated for the ISS.

As noted in footnote 7, NASA maintains numerous structures and facilities, some of which are known to contain asbestos. Current technical guidelines do not require the recording of a contingent liability resulting from future asbestos remediation efforts. Management is developing estimates of the cost to remediate asbestos contamination which does not pose an immediate health hazard either because it is friable but not exposed, or non-friable consistent with applicable FASAB guidance which calls for recognition of such asbestos, if determinable, in FY 2012. Management does not believe such amounts will be material.

NOTE 12. OTHER LIABILITIES

NASA contracts with vendors for various types of goods and services that are necessary to accomplish its mission. The period of performance for these contracts typically spans the duration of NASA programs, which could be numerous years. The vendor performs tasks in accordance with the contract instructions and specifications throughout this period, prior to final delivery and NASA's acceptance of the product. In such cases, NASA records a cost accrual as the work is performed and constructive acceptance of the end product occurs throughout the fiscal year. The contractor provides cost reports or estimates, which is the basis to record an accrual for contractor costs.

						2010
(In Millions of Dollars)	C	urrent	Non (Current	Т	otal
Intragovernmental Liabilities:						
Advances From Others	\$	64	\$		\$	64
Worker's Compensation		5		8		13
Employer Contributions and Payroll Taxes		25				25
Liability for Deposit and Clearing Funds						
Other Accrued Liability		6				6
Total Intragovernmental		100		8		108
Unfunded Annual Leave				213		213
Accrued Funded Payroll		115				115
Advances from Others		35				35
Employer Contributions and Payroll Taxes		4				4
Liability for Deposit Funds		28				28
Other Accrued Liabilities		1,252				1,252
Total from the Public		1,434		213		1,647
Total Other Liabilities	\$	1,534	\$	221	\$	1,755
						2009
(In Millions of Dollars)	C	urrent	Non-	Current	Т	otal
Intragovernmental Liabilities:						
Advances From Others	\$	110	\$		\$	110
Workers' Compensation		5		9		14
Employer Contributions and Payroll Taxes		22				22
Liability for Deposit and Clearing Funds		1				1
Other Accrued Liability		6				6
Total Intragovernmental		144		9		153
Unfunded Annual Leave				208		208
Accrued Funded Payroll		106				106
Advances from Others		57				57
Employer Contributions and Payroll Taxes		4				4
Other Accrued Liabilities		1,258				1,258
Total from the Public		1,425		208		1,633
Total Other Liabilities	\$	1,569	\$	217	\$	1,786

NOTE 13. CONTINGENT LIABILITIES

NASA is a party in various administrative proceedings, court actions (including tort suits), and claims. For cases management and legal counsel believe it is probable that the outcomes will result in a loss to NASA, liabilities are recorded. For September 30, 2010 and September 30, 2009, the amount of liability recorded was less than \$1 million. There were certain cases reviewed by legal counsel where the probable future loss is remote and as such no liability has been recorded in connection with these cases.

NASA is concluding the Constellation and Shuttle programs. As a result, certain contracts in support of these programs are nearing completion. It is possible that additional liabilities and costs may result, including those from employee benefit plans. In addition, certain other contracts may contain provisions regarding contingency obligations to fund accumulated unfunded employee benefit and other contract termination costs upon contract termination.

NOTE 14. INTRAGOVERNMENTAL COST AND EXCHANGE REVENUE

Intragovernmental costs and revenue are exchange transactions made between NASA and other federal government entities. Costs and revenue with the Public result from transactions between NASA and other non-federal entities.

Aeronautics Research Intragovernmental Costs Public Cost Total Aeronautics Research Costs Less: Intragovernmental Earned Revenue Public Earned Revenue Total Aeronautics Research Earned Revenue Total Aeronautics Research Net Cost Exploration Systems Intragovernmental Costs Public Cost Total Exploration Systems Costs Less: Intragovernmental Earned Revenue Public Earned Revenue Total Exploration Systems Net Cost	\$ 46 770	\$ 40
Public Cost Total Aeronautics Research Costs Less: Intragovernmental Earned Revenue Public Earned Revenue Total Aeronautics Research Earned Revenue Total Aeronautics Research Net Cost Exploration Systems Intragovernmental Costs Public Cost Total Exploration Systems Costs Less: Intragovernmental Earned Revenue Public Earned Revenue Total Exploration Systems Earned Revenue Total Exploration Systems Earned Revenue Total Exploration Systems Net Cost	\$	\$ 40
Total Aeronautics Research Costs Less: Intragovernmental Earned Revenue Public Earned Revenue Total Aeronautics Research Earned Revenue Total Aeronautics Research Net Cost Exploration Systems Intragovernmental Costs Public Cost Total Exploration Systems Costs Less: Intragovernmental Earned Revenue Public Earned Revenue Total Exploration Systems Earned Revenue Total Exploration Systems Net Cost	770	43
Less: Intragovernmental Earned Revenue Public Earned Revenue Total Aeronautics Research Earned Revenue Total Aeronautics Research Net Cost Exploration Systems Intragovernmental Costs Public Cost Total Exploration Systems Costs Less: Intragovernmental Earned Revenue Public Earned Revenue Total Exploration Systems Earned Revenue Total Exploration Systems Net Cost		785
Intragovernmental Earned Revenue Public Earned Revenue Total Aeronautics Research Earned Revenue Total Aeronautics Research Net Cost Exploration Systems Intragovernmental Costs Public Cost Total Exploration Systems Costs Less: Intragovernmental Earned Revenue Public Earned Revenue Total Exploration Systems Earned Revenue Total Exploration Systems Earned Revenue Total Exploration Systems Net Cost	816	 828
Public Earned Revenue Total Aeronautics Research Earned Revenue Total Aeronautics Research Net Cost Exploration Systems Intragovernmental Costs Public Cost Total Exploration Systems Costs Less: Intragovernmental Earned Revenue Public Earned Revenue Total Exploration Systems Earned Revenue Total Exploration Systems Net Cost		
Total Aeronautics Research Earned Revenue Total Aeronautics Research Net Cost Exploration Systems Intragovernmental Costs Public Cost Total Exploration Systems Costs Less: Intragovernmental Earned Revenue Public Earned Revenue Total Exploration Systems Earned Revenue Total Exploration Systems Net Cost	103	94
Total Aeronautics Research Net Cost Exploration Systems Intragovernmental Costs Public Cost Total Exploration Systems Costs Less: Intragovernmental Earned Revenue Public Earned Revenue Total Exploration Systems Earned Revenue Total Exploration Systems Net Cost	16	19
Exploration Systems Intragovernmental Costs Public Cost Total Exploration Systems Costs Less: Intragovernmental Earned Revenue Public Earned Revenue Total Exploration Systems Earned Revenue Total Exploration Systems Net Cost	119	113
Intragovernmental Costs Public Cost Total Exploration Systems Costs Less: Intragovernmental Earned Revenue Public Earned Revenue Total Exploration Systems Earned Revenue Total Exploration Systems Net Cost	 697	 715
Public Cost Total Exploration Systems Costs Less: Intragovernmental Earned Revenue Public Earned Revenue Total Exploration Systems Earned Revenue Total Exploration Systems Net Cost		
Total Exploration Systems Costs Less: Intragovernmental Earned Revenue Public Earned Revenue Total Exploration Systems Earned Revenue Total Exploration Systems Net Cost	\$ 250	\$ 228
Less: Intragovernmental Earned Revenue Public Earned Revenue Total Exploration Systems Earned Revenue Total Exploration Systems Net Cost	5,110	4,925
Intragovernmental Earned Revenue Public Earned Revenue Total Exploration Systems Earned Revenue Total Exploration Systems Net Cost	5,360	5,153
Public Earned Revenue Total Exploration Systems Earned Revenue Total Exploration Systems Net Cost		
Total Exploration Systems Ret Cost Total Exploration Systems Net Cost	45	19
Total Exploration Systems Net Cost	17	14
	62	33
	\$ 5,298	\$ 5,120
Science		
Intragovernmental Costs	\$ 411	\$ 395
Public Cost	6,286	6,211
Total Science Costs	6,697	6,606
Less:		
Intragovernmental Earned Revenue	623	595
Public Earned Revenue	26	21
Total Science Earned Revenue	649	616
Total Science Net Cost	\$ 6,048	\$ 5,990
Space Operations		
Intragovernmental Costs	\$ 404	\$ 471
Public Cost	9,290	10,599
Total Space Operations Costs	9,694	11,070
Less:		
Intragovernmental Earned Revenue	369	349
Public Earned Revenue	60	79
Total Space Operations Earned Revenue	429	428
Total Space Operations Earned Net Cost	\$ 9,265	\$ 10,642
Net Cost of Operations	\$ 21,308	\$ 22,467

NOTE 15. APPORTIONMENT CATEGORIES OF OBLIGATIONS INCURRED: DIRECT VS. REIMBURSABLE OBLIGATIONS

Category A consists of amounts requested to be apportioned for each calendar quarter in the fiscal year. Category B consists of amounts requested to be apportioned on a basis other than calendar quarters, such as time periods other than quarters, activities, projects, objects, or a combination thereof.

((In Millions of Dollars)	2010	2009
Direct Obligations:		
Category A	\$ 1	\$ 1
Category B	19,412	 18,705
Reimbursable Obligations:	_	
Category B	1,481	1,475
Total Obligations Incurred	\$ 20,894	\$ 20,181

NOTE 16. EXPLANATION OF DIFFERENCES BETWEEN THE STATEMENT OF BUDGETARY RESOURCES (SBR) AND THE BUDGET OF THE U.S. GOVERNMENT

The FY 2012 Budget of the United States Government (President's Budget) presenting the actual amounts for the year ended September 30, 2010 has not been published as of the issue date of these financial statements. The FY 2012 President's Budget is scheduled for publication in 2011.

NASA reconciled the amounts of the FY 2009 column on the Statement of Budgetary Resources (SBR) to the actual amounts for FY 2009 in the FY 2011 President's Budget for budgetary resources, obligations incurred, distributed offsetting receipts and net outlays as presented below.

			Distributed	
	Budgetary		Offsetting	Net
(In Millions of Dollars)	Resources	Obligations	Receipts	Outlays
Combined Statement of Budgetary Resources	\$ 21,501	\$ 20,181	\$ (8) \$	19,177
Included on SBR, not in the President's Budget				
Expired Accounts	(206)	(16)		
Distributed Offsetting Receipts			8	
Other	(3)	1		
Budget of the United States Government	\$ 21,292	\$ 20,166	\$ \$	19,177

The difference between the Statement of Budgetary Resources and the President's Budget represents expired, unobligated balances reported on the SBR but not in the Budget of the United States Government and other is primarily rounding.

NOTE 17. UNDELIVERED ORDERS AT THE END OF THE PERIOD

Undelivered Orders at the end of the period totaled \$5.9 billion and \$5.8 billion as of September 30, 2010 and September 30, 2009, respectively.

NOTE 18. RECONCILIATION OF NET COST TO BUDGET

SFFAS No.7, Accounting for Revenues and Other Financing Concepts for Reconciling Budgetary and Financial Accounting, requires a reconciliation of proprietary and budgetary accounting information. Accrual-based measures used in the Statement of Net Cost differ from the obligation-based measures used in the Statement of Budgetary Resources.

The Statement of Financing is intended to provide assurance that certain financial information is consistent with similar amounts found in budget reports. This note reconciles obligations of budget authority to the accrual-based net cost of operations. The Net Cost of Operations as presented on the Statement of Financing is determined by netting the obligations as adjusted and non-budgetary resources and making adjustments for the total resources that do not fund net cost of operations, the total costs that do not require resources, and financing sources yet to be provided. The result is Net Cost of Operations as reported on the Statement of Net Cost.

(In Millions of Dollars)	2010	2009
Resources Used to Finance Activities		
Budgetary Resources Obligated		
Obligation Incurred	\$ 20,894	\$ 20,181
Less: Spending Authority from Offsetting Collections and Recoveries	1,557	1,770
Obligations Net of Offsetting Collections and Recoveries	19,337	18,411
Less: Offsetting Receipts		1
Net Obligations	19,337	18,410
Other Resources		
Donations & Forfeitures of Property	12	10
Transfers In (Out) Without Reimbursements	(2)	57
Imputed Financing from Costs Absorbed by Others	164	151
Net Other Resources Used to Finance Activities	174	218
Total Resources Used to Finance Activities	19,511	18,628
Resources Used to Finance Items Not Part of the Net Cost of Operations		
Change in Budgetary Resources Obligated for Goods, Services, and	(245)	583
Benefits Ordered But Not Yet Provided		
Resources that Fund Expenses Recognized in Prior Periods	(29)	(71)
Resources that Finance the Acquisition of Assets	(2,172)	(3,023)
Other Resources or Adjustments to Net Obligated Resources that Do Not	(10)	(67)
Affect Net Cost of Operations		
Total Resources Used to Finance Items Not Part of the Net Cost of Operations	(2,456)	(2,578)
Total Resources Used to Finance the Net Cost of Operations	\$ 17,055	\$ 16,050

NOTE 18. RECONCILIATION OF NET COST TO BUDGET (CONTINUED)

(In Millions of Dollars)	2010		2009	
Components of Net Cost that Will Not Require of Generate Resources in the Current Period				
Components Requiring or Generating Resources in Future Periods				
Increases in Annual Leave Liability	\$	5	\$	12
Increases in Environmental and Disposal Liability		119		
Other	ı	10		
Total Components of Net Cost that Will Require or Generate Resources in Future Periods		134		12
Components Not Requiring or Generating Resources				
Depreciation		1,444		2,511
Revaluation of Assets or Liabilities		10		(62)
Other		2,665		3,956
Total Components of Net Cost of Operations that Will Not Require		4,119		6,405
or Generate Resources				
Total Components of Net Cost of Operations that Will Not Require		4,253		6,417
or Generate Resources in the Current Period				
Net Cost of Operations	\$	21,308	\$	22,467

NOTE 19. OTHER INFORMATION

In FY 2010, NASA reviewed its PP&E balances to determine if SFFAS No. 35 should be applied to those balances. Those reviews resulted in the standard being applied to the ISS and Real Property (Structures, Facilities, and Leasehold Improvements) balances only. No adjustments were recorded because the alternative support for these balances indicated that the recorded values were materially correct. In addition, NASA did review its Institutional Equipment to determine if application of SFFAS No. 35 was necessary, but determined that the recorded balances were adequately supported by documentation consistent with SFFAS No. 6 requirements.

Stewardship Investments: Research and Development and Other Initiatives

NASA's programs and activities are carried out through four R&D/Other initiatives: Aeronautics Research, Exploration Systems, Science and Space Operations. Each initiative is comprised of multiple themes and numerous programs comprise each theme. In FY 2006 NASA's former enterprise structure was mapped to the new R&D structure and NASA reports expenses using this new structure. Therefore, R&D expenses are now reported on a program, not Enterprise basis. This is NASA's fifth year reporting under this new structure.

To provide the reader with a full picture of NASA expenses, both R&D and non-R&D, NASA has included expenses for non R&D costs associated with NASA activities such as Education and Outreach, Space Operations Programs. Descriptions for the work associated with these costs are also presented.

Research and Development and Other Initiative Costs by Theme and Program

(In Millions of Dollars)		2010	2	2009	2	2008	2007	2	006
Aeronautics Research									
Aeronautics Technology									
Aviation Safety	\$	78	\$	79	\$	81	\$ 74	\$	63
Airspace Systems		103		124		108	84		34
Fundamental Aeronautics		272		337		367	350		283
Aeronautics Test		67		70		66	38		
Integrated Systems Research		26							
Aeronautics Technology Total		546		610		622	546		380
Aeronautics Research Total	\$	546	\$	610	\$	622	\$ 546	\$	380
Exploration Systems									
Constellation Systems									
Constellation Systems	\$	3,381	\$	3,150	\$	3,092	\$ 1,731	\$	241
Commercial Crew and Cargo		98		122					
Constellation Systems Total		3,479		3,272		3,092	1,731		241
Advanced Capabilities									
Human Research Program		156		157		80			
Exploration Technology Developm	ent	275		314		280	124		
Lunar Precursor Robotic Program		44		94		124	147		37
Advanced Capabilities Total		475		565		484	271		37
Exploration Other R & D Costs		15		30		224	623		882
Exploration Systems Total	\$	3,969	\$	3,867	\$	3,800	\$ 2,625		1,160

Stewardship Investments: Research and Development and Other Initiatives

Research and Development and Other Initiative Costs by Theme and Program (continued)

sience					
Earth Science					
Earth Science Research	\$ 427	\$ 423	\$ 522	\$ 596	\$ 28
Earth Systematic Missions	780	807	777	473	20
Earth System Science Pathfinder	97	99	121	117	6
Earth Science Multi-Mission Operations	155	138	165	192	12
Earth Science Technology	51	58	76	142	43
Applied Sciences	45	47	45	37	
Earth Science Total	1,555	1,572	1,706	1,557	1,12
Planetary Science					
Planetary Science Research	234	240	264	207	19
Lunar Quest Program	43				
Discovery	219	230	201	258	27
New Frontiers	278	296	102	115	19
Mars Exploration	376	408	772	687	38
Outer Planets	97	64			
Technology	87	85	55	91	1
Planetary Science Total	1,334	1,323	1,394	1,358	1,1
Astrophysics					
Astrophysics Research	155	183	278	310	46
Cosmic Origins	630	584			
Physics of the Cosmos	131	87			
Exoplanet Exploration	63	27			
Astrophysics Explorer	110	118	85	68	:
Astrophysics Total	1,089	999	363	378	4
Heliophysics					
Heliophysics Research	174	158	77		
Living with a Star	255	179	149	143	
Solar Terrestrial Probes	109	89	60	46	4
Heliophysics Explorer	55	37	55	72	(
New Millennium	4	8	3		
Near Earth Networks	1	8	48		
Deep Space Mission Systems (DSMS)	4	71	229	221	18
Heliophysics Total	602	550	621	482	3
Science Historical R & D Costs	17	215	878	809	1,18
cience Total	\$ 4,597	\$ 4,659	\$ 4,962	\$ 4,584	\$ 4,34

Stewardship Investments: Research and Development and Other Initiatives

Non-Research and Development and Other Initiative Costs by Theme and Program

(In Millions of Dollars)	2010		2009	2008	2007	2006
Aeronautics Research						
Aeronautics Indirect Cost	\$ 270	\$	218	\$ 157	\$ 154	\$ 749
Aeronautics Research Tool	\$ 270	\$	218	\$ 157	\$ 154	\$ 749
Exploration Systems						
Exploration Systems Indirect Cost	\$ 1,391	\$	1,286	\$ 1,011	\$ 592	\$ 1,542
Exploration Systems Total	\$ 1,391	\$	1,286	\$ 1,011	\$ 592	\$ 1,542
Science						
Earth Science						
Education and Outreach	\$ 3	\$	14	\$ 17	\$ 9	\$ 5
Science Indirect Costs	2,097		1,933	1,413	913	2,279
Science Total	\$ 2,100	\$	1,947	\$ 1,430	\$ 922	\$ 2,284
Space Operations						
Space Shuttle						
Space Shuttle	\$ 3,190	\$	3,176	\$ 3,309	\$ 3,338	\$ 3,216
Hurricane Repairs	25		102	94	106	54
Subtotal Space Shuttle	3,215		3,278	3,403	3,444	3,270
International Space Station	2,289		2,148	1,588	1,398	1,233
Space and Flight Support (SFS)						
Space Communications and Navigation	590		547	238	138	67
Human Space Flight Operations	81					
Launch Services	105		201	406	339	335
Rocket Propulsion Test	40		46	45	49	53
Crew Health & Safety	9		9	8	8	6
Subtotal Space and Flight support (SFS)	825		803	697	534	461
Space Operation Indirect Cost	3,365		4,841	1,761	1,067	3,153
Space Operations Total	\$ 9,694	\$	11,070	\$ 7,449	\$ 6,443	\$ 8,117
Total Non-Research & Development Expenses	\$ 13,455	_\$_	14,521	\$ 10,047	\$ 8,111	\$ 12,692
Total Expenses	\$ 22,567	\$	23,657	\$ 19,431	\$ 15,866	\$ 18,573

Stewardship Investments: Research and Development and Other Initiatives

STEWARDSHIP INVESTMENTS: Research and Development and Other Initiatives (continued)

NASA makes substantial Research and Development investments for the benefit of the United States. These amounts are expensed as incurred in determining the net cost of operations.

NASA's Research and Development and Other Initiatives programs include activities to extend our knowledge of Earth, its space environment, and the universe, and to invest in new aeronautics and advanced space transportation technologies that support the development and application of technologies critical to the economic, scientific, and technical competitiveness of the United States.

Investment in Research and Development and Other Initiatives refers to those expenses incurred to support the search for new or refined knowledge and ideas and for the application or use of such knowledge and ideas for the development of new or improved products and processes with the expectation of maintaining or increasing national economic productive capacity or yielding other future benefits.

Research and Development and Other Initiatives: Theme and Program Descriptions AERONAUTICS

Theme: Aeronautics Technology (AT)

Aeronautics Technology develops technologies to improve aircraft and air system safety, security and performance; reduce aircraft noise and emissions; and increase the capacity of the National Airspace System (NAS).

Program: Aviation Safety

The Aviation Safety Program (AvSP) develops innovative tools, concepts, methods, and technologies that will improve the intrinsic safety attributes of current and future aircraft, and that will help overcome aviation safety challenges that would otherwise constrain the full realization of the Next Generation Air Transportation System (NextGen).

Program: Airspace Systems Program

The Airspace Systems Program (ASP) conducts research to enable NextGen capabilities such as foundational research in multi-aircraft flow and airspace optimization, trajectory design and conformance, separation methods, and adaptive systems. The Program research for the airspace and airportal domains is integrated into gate-to-gate solutions.

Program: Fundamental Aeronautics

The Fundamental Aeronautics Program (FAP) conducts research to enable the design of vehicles that fly through any atmosphere at any speed. Future aircraft must address multiple design challenges, and therefore a key focus will be the development of physics-based, multidisciplinary design, analysis, and optimization (MDAO) tools.

Stewardship Investments: Research and Development and Other Initiatives

Program: Aeronautics Test Program

The Aeronautics Test Program (ATP) is dedicated to the mastery and intellectual stewardship of the core competencies of Aeronautics testing, both on the ground and in the air. ATP's purpose is to ensure the strategic availability of a minimum, critical suite of aeronautical test facilities which are necessary to meet the long-term needs and requirements of the nation.

Program: Integrated Systems Research

The Integrated Systems Research Program aims to take a system-level approach to reduce the environmental impact of aviation. The environmental impact of various air vehicle technologies are evaluated in terms of noise, local and global emissions, and local air quality.

EXPLORATION SYSTEMS

Theme: Constellation Systems

Through the Constellation Systems Theme NASA planned to develop, demonstrate, and deploy systems that will enable sustained human and robotic exploration of the Moon, Mars, and beyond.

Program: Constellation Systems

The Constellation Program was intended to create a new generation of spacecraft for human spaceflight, consisting primarily of the Ares I and Ares V launch vehicles, the Orion crew capsule, the Earth Departure Stage, and the Altair Lunar Lander.

Program: Commercial Crew and Cargo

The Commercial Crew and Cargo is a partnership between NASA and industry aimed at spurring private industry to provide cost-effective cargo and crew delivery to the International Space Station and expanding the commercial technology sector. Ultimately, the partnership hopes to allow NASA to focus its internal resources on exploration.

Theme: Advanced Capabilities

The Advanced Capabilities Theme provides knowledge, technology, and innovation that will enable current and future exploration missions.

Program: Human Research

The Human Research program (HRP) investigates and mitigates the highest risks to human health and performance in support of NASA exploration missions. ESMD and Constellation Systems documents provide the mission architecture definitions, mission concepts of operations, vehicle, habitat, and space suit performance requirements, and other technical information needed to focus the HRP efforts for specific exploration missions. HRP conducts research, develops countermeasures, and undertakes technology development to inform and support compliance with NASA's health, medical, human performance, and environmental standards.

Program: Exploration Technology Development

The Exploration Technology Development Program (ETDP) develops new technologies that will enable NASA to conduct future human and robotic exploration missions, while reducing mission risk and cost. By maturing new technologies to the level of demonstration in a relevant environment early enough to support a flight system's Preliminary Design Review, NASA can significantly reduce both cost and risk.

Stewardship Investments: Research and Development and Other Initiatives

Program: Lunar Precursor Robotic

The Lunar Precursor Robotic program supports America's return to the Moon by executing lunar robotic missions to conduct research and prepare for future human exploration. These missions will gather data important for reducing the risks to astronauts, identify resources, and map the lunar environment.

SCIENCE

Theme: Earth Science

NASA studies this dynamic Earth system to trace effect to cause, connect variability and forcing with response, and vastly improve national capabilities to predict climate, weather, natural hazards, and conditions in the space environment.

Program: Earth Science Research

The Earth Science Research Program improves the capability to document the global distribution of a range of important environmental parameters related to the Earth's atmosphere, hydrosphere, biosphere, cryosphere, and land surface; to understand the processes that drive and connect them; and to improve our capability to predict the future evolution of the Earth system, including climate, weather, and natural hazards.

Program: Earth Systematic Missions

Earth Systematic Missions provide Earth observing satellites that contribute to the provision of long-term environmental data sets that can be used to study the evolution of the Earth system on a range of temporal scales. This information is used to analyze, model, and improve understanding of the Earth system.

Program: Earth System Science Pathfinder

The Earth System Science Pathfinder (ESSP) program addresses unique, specific, highly-focused mission requirements in Earth science research. ESSP includes a series of relatively low to moderate cost, small to medium sized, competitively selected, principal investigator led missions that are built, tested, and launched in a short time interval. These missions are capable of supporting a variety of scientific objectives related to Earth science, involving the atmosphere, oceans, land surface, polar ice regions and solid earth.

Program: Earth Science System Multi-Mission Operations

The Earth Science Multi-Mission Operations Program acquires, preserves, and distributes observational data to support Earth Science focus areas in conformance with national science objectives. Facilities involved in this undertaking include data-handling, data processing, and archiving systems.

Program: Earth Science Technology

The Earth Science Technology Program (ESTP) provides the Earth Science Theme with new capabilities, enabling previously unforeseen or infeasible science investigations, enhancing existing measurement capabilities, and reducing the cost, risk, and development times of Earth science measurements.

Stewardship Investments: Research and Development and Other Initiatives

Program: Applied Sciences

The Applied Sciences Program is focused on working with Federal agencies and national organizations to extend the use of technology and data associated with NASA's constellation of Earth system observing spacecraft. These spacecraft, which routinely make measurements using dozens of research instruments, are used by a community of Earth system scientists in laboratories, universities, and research institutions throughout the country, and around the world, to model the Earth system and improve predictions, projections, and forecasts.

Theme: Planetary Science

The Planetary Science Theme advances scientific knowledge of the origin and history of the solar system, including the history of life and whether it evolved beyond Earth. Equally important is finding resources, evaluating, and mitigating the risks to humans that will be encountered as we conduct an overall balanced program of science, exploration, and aeronautics consistent with the redirection of the human spaceflight program to focus on exploration.

Program: Planetary Science Research

The Planetary Science Research program develops the theoretical tools and laboratory data needed to analyze flight data, makes possible new and better instruments to fly on future missions, and analyzes the data returned so that the program can answer specific questions posed and fit this new knowledge into the overall picture of the solar system.

Program: Lunar Quest Program

The Lunar Quest Program (LQP) conducts science exploration of the Moon through research and analysis, as well as through the development of a series of small-medium satellite and surface missions. The goal of LQP is to provide small robotic lunar science investigations and lunar research and analysis addressing prioritized science objectives. The objectives include re-establishing lunar science and a lunar science community, facilitating the application of enhancing or enabling technologies to support flight missions, and enhancing science opportunities in the implementation of NASA's lunar exploration goals.

Program: Discovery

NASA's Discovery program gives scientists the opportunity to find innovative ways to unlock the mysteries of the solar system. It provides lower-cost, highly focused planetary science investigations designed to enhance our understanding of the solar system. The Discovery program offers the scientific community the opportunity to assemble a team and design exciting, focused science investigations that complement NASA's larger planetary science explorations.

Program: New Frontiers

The New Frontiers program, a class of competed medium-sized missions, represents a critical step in the advancement of the solar system exploration. Proposed science targets for the New Frontiers program include Pluto and the Kuiper Belt, Jupiter, Venus, and sample returns from Earth's Moon and a comet nucleus.

Stewardship Investments: Research and Development and Other Initiatives

Program: Mars Exploration

The Mars Exploration program has been developed to conduct a rigorous, incremental, discovery-driven exploration of Mars to determine the planet's physical, dynamic, and geological characteristics, investigate the Martian climate in the context of understanding habitability, and investigate whether Mars ever had the potential to develop and harbor any kind of life.

Program: Outer Planets

The Outer Planets Program enables science investigations across a broader array of disciplines and in more depth than competed missions. The science discoveries made by these missions are not expected to be easily displaced with time and are expected the overthrow previous paradigms and create new ones in their place.

Program: Technology

Robotic spacecraft use electrical per for propulsion, data acquisition, and communication to accurately place themselves in orbit around and onto the surfaces of bodies about which we may know relatively little. These systems ensure that they survive and function in hostile and unknown environments, acquire and transmit data throughout their lifetimes, and sometimes transport samples back to Earth. Since successful completion of these missions is so dependent on power, the future Planetary Science program portfolio of missions will demand advances in power and propulsion systems.

Theme: Astrophysics

The Astrophysics Theme seeks to understand the cycles of matter and energy that formed, evolve, and govern the universe, and how they created the unique conditions that support life. Where are we from? Are we alone? NASA searches for answers to these questions looking far away, towards the beginning of time, to see galaxies forming, and close to home, in search of planetary systems like Earth around nearby stars.

Program: Astrophysics Research

The Astrophysics Research program (formerly Universe Research) strives to answer critical questions about the nature of the universe with a host of operating missions led by investigators from academia and industry, as well as funding grants for basic research, technology development, and data analysis from past and current missions. All data collected by missions are archived in data centers located at universities and NASA centers throughout the country.

Program: Cosmic Origins

The Cosmic Origins missions explore how the expanding universe grew into a grand, cosmic web of galaxies; how stars and planets formed within the galaxies; how stars created the heavy elements, such as carbon, that are essential for life. Major breakthroughs in our knowledge of the cosmos have already been made with the current suite of missions.

Stewardship Investments: Research and Development and Other Initiatives

Program: Physics of the Cosmos

Reveal laws and forces of the universe at the most fundamental level in ways that can only be done from space. Missions will probe back to the beginning of time by measuring the cosmic microwave background radiation in novel ways and using gravity waves as an entirely new window on the universe. The nature of dark matter that shepherds the growth of galaxies and large-scale structure will be determined, the mysterious dark energy pervading the universe will be uncovered and the limits of Einstein's theories will be tested.

Program: Exoplanet Explorer

The Exoplanet Explorer Program, through the use of astrometry, precision interferometry and eventually direct detection, will embark on a series of missions designed to detect and characterize Earth-sized planets that are orbiting in the "habitable zone" of nearby stars (the range of distances at which the liquid water could be stable at the planet's surface). The goal is to gain insight into one of humans most timeless questions: Are we alone?

Program: Astrophysics Explorer

The Astrophysics Explorer program (formerly Explorer) provides frequent flight opportunities for world-class astrophysics and space physics investigations, utilizing innovative, streamlined and efficient management approaches to spacecraft development and operations. The program (including Future Explorers) is managed within the Earth -Sun Theme, but selected projects are managed under the Universe Theme.

Theme: Heliophysics

The Heliophysics Theme studies the science of the Sun-Solar System Connection to: (1) understand the Sun and its effects on Earth, the solar system, and the space environmental conditions that will be experienced by explorers, and (2) demonstrate technologies that can improve future operational systems.

Program: Heliophysics Research

The Heliophysics Research program undertakes scientific investigations utilizing operational spacebased and suborbital platforms (surface, balloon, aircraft, and rocket). The program also funds basic research and modeling utilizing the results of the full array of NASA's missions.

Program: Living with a Star

The Living with a Star (LWS) program seeks to understand how and why the Sun varies, how Earth and other planets respond, and how the variability and response affect humanity. Achieving these goals will enable a reliable space weather prediction so undesirable space weather effects can be accommodated or mitigated before they occur.

Program: Solar Terrestrial Probes

The primary goal of the Solar Terrestrial Probes (STP) Program is to understand how the Sun, heliosphere, and planetary environments are connected in a single system.

Stewardship Investments: Research and Development and Other Initiatives

Program: Heliophysics Explorer

The Heliophysics Explorer program provides frequent flight opportunities for world-class astrophysics and space physics investigations, using innovative, streamlined and efficient management approaches to spacecraft development and operations. The program is composed of an on-going series of space science missions that are independent, but share a common funding and management structure. The program emphasizes missions that can be accomplished under the control of the scientific research community and seeks to control total mission lifecycle costs. It also seeks to enhance public awareness of, and appreciation for, space science and to incorporate educational and public outreach activities.

Program: New Millennium

The New Millennium Program (NMP) is a technology flight validation program designed to retire risk of key emerging and breakthrough technologies to enable future NASA science missions. The objectives are to capitalize on investments being made in U.S. technological capabilities and accelerate the incorporation of payoff, advanced technologies into future science missions by conducting in-space validation missions, when the technologies must be tested in space in order to be validated. NMP allows NASA to conduct technology maturation and validation in low-cost NMP projects, rather than during science mission development.

Program: Near Earth Networks

The Near Earth Networks program provides multi-mission driven space flight tracking, telemetry and command, meteorological and photo-optical services and associated activities of customer interface, network and range scheduling, cross-cutting maintenance and systems engineering, facilities, safety, and security. These services are for near-Earth spaceflight missions, including human space flight (Space Shuttle Program and Constellation), sounding rockets, and near-Earth orbital flight in support of Science missions, Space Operations, Exploration Systems, and aeronautics services for unmanned aerial vehicle, aircraft, and rockets in support of upper atmospheric research.

Program: Deep Space Mission Systems (DSMS)

The Deep Space Mission System (DSMS) program enables human and robotic exploration of the solar system and beyond by providing reliable, high-performance, and cost-effective telecommunications and navigation services.

Non-Research and Development and Other Initiatives Programs

SCIENCE

Theme: Earth Science

Program: Education and Outreach

The Earth Science Education and Outreach Program seeks to make the discoveries and knowledge generated from NASA's Earth-observing satellites and scientific research (including applied science) accessible to students, teachers, and the public. It addresses workforce preparation and the education pipeline, and engages the public in better understanding NASA Earth Science research results from space.

Stewardship Investments: Research and Development and Other Initiatives

SPACE OPERATIONS

Theme: Space Shuttle

The Space Shuttle is currently the only launch capability owned by the United States that enables human access to space, and the only vehicle that can support the assembly of the International Space Station (ISS). NASA will phase-out the Space Shuttle within the next few years when its role in ISS assembly is complete.

Program: Space Shuttle

NASA manifested the last six Space Shuttle mission for FY 2010 and 2011, including the STS-129 mission that flew in November 2009 and the STS-130 mission in February 2010. The final six flight of the Space Shuttle are dedicated to completing assembly of the International Space Station (ISS), delivering and installing the Alpha Magnetic Spectrometer (AMS) to the ISS, and prepositioning equipment so that the ISS can achieve its full research potential. NASA will continue its priority to safety complete the remaining Space Shuttle manifest.

Program: Hurricane Repairs

The Hurricane Repairs include emergency supplemental costs for Hurricane Katrina response and recovery.

Theme: International Space Station

This Theme supports the construction and operations of a research facility in low Earth orbit as NASA's first step in achieving the Vision for Space Exploration. The ISS provides a unique, continuously operating capability to develop medical countermeasures for long-term human space travel: develop and test technologies and engineering solutions in support of exploration; and provide ongoing practical experience in living and working in space. It also supports a variety of pure and applied research for the U.S. and its International Partners. ISS assembly will be completed by the end of the decade. NASA is examining configurations for the Space Station that meet the needs of both the new space exploration vision and our international partners using as few Shuttle flights as possible. A key element of the ISS program is the crew and cargo services project, which will purchase services for cargo and crew transport using existing and emerging capabilities.

Theme: Space and Flight Support

This theme encompasses Space Communications, Launch Services, Rocket Propulsion Testing, and Crew Health and Safety. Space Communications consists of (1) the Tracking and Data Relay Satellite System (TDRSS), which supports activities such as the Space Shuttle, ISS, Expendable Launch Vehicles, and research aircraft, and (2) the NASA Integrated Services Network, which provides telecommunications services at facilities, such as flight support networks, mission control centers and science facilities, and administrative communications networks for NASA Centers. The Launch Services program focuses on meeting the Agency's launch and payload processing requirements by assuring safe and cost-effective access to space via the Space Shuttle and expendable launch vehicles.

Program: Space Communications and Navigations

The Space Communications Program (SCP) links flight missions to Earth to accomplish mission objectives. NASA's backbone of communications capabilities reliably transmits data between the ground control centers and the flight missions. These capabilities keep the missions operating safely and return volumes of science and technology data that has led to innumerable discoveries about Earth, the solar system, and the universe.

Stewardship Investments: Research and Development and Other Initiatives

Program: Human Space Flight Operations

The Human Space Flight Operations operates the Space Flight Crew Operations which provides trained crew members for all of NASA human space flight endeavors. The program supports up to six human space flights on the Space Shuttle to the International Space Station, as well as long-duration crew on ISS and crew expertise to Constellation development.

Program: Launch Services

The Launch Services Program, which works closely with other government agencies and the launch industry, seeks to ensure that the most safe, reliable, on-time, cost-effective launch opportunities are available on a wide range of launch systems.

Program: Rocket Propulsion Testing

As the principal implementing authority for NASA's rocket propulsion testing, the Rocket Propulsion Test (RPT) Program reviews, approves, and provides direction on rocket propulsion test assignments, capital asset improvements, test facility modernizations and refurbishments, integration for multi-site test activities, identification and protection of core capabilities, and the advancement and development of test technologies.

Program: Crew Health & Safety

The health care of the NASA Astronaut Corps is the responsibility of space medical operations at the Johnson Space Center. A portion of the responsibilities for that care is managed within the Crew Health and Safety program (CHS). CHS enables the following: 1) healthy and productive crew during all phases of spaceflight missions; 2) implementation of a comprehensive health care program for astronauts; and 3) the prevention and mitigation of negative long-term health consequences of space flight.

National Aeronautics and Space Administration Required Supplementary Information Combining Schedule of Budgetary Resources For the Fiscal Year Ended September 30, 2010

(In Millions of Dollars)	Space Operations	Science Mission	Exploration Mission	Aeronautics Mission	Cross-Agency Mission	Education Mission	Office of Inspector General	American Recovery and Reinvestment Act	Construction and Environmental Compliance and Restoration	Other	Total
Budgetary Resources											
Unobligated Balance, Brought Forward, October 1	\$91	\$62	\$47	\$4	\$291	\$28	\$2	\$608	 \$	\$187	\$1,320
Recoveries of Prior Year Obligations	63	84	61	7	45	I	I	9	I	64	330
Budget Authority:											
Appropriation	6,147	4,469	3,746	501	3,194	183	36	I	448	-	18,725
Spending Authority from Offsetting Collections											
Earned											
Collected	∞	I	I	I	1,226	I	-	33	က	204	1,475
Change in Receivable Federal Sources	(1)	I	I	I	(125)	I	I	Ð	I	(20)	(147)
Change in Unfilled Orders											
Advance Received	(2)	I	I	I	(46)	I	-	-	I	(36)	(87)
Without Advance from Federal Sources	(2)	I	I	I	108	I	-	(29)	I	(91)	(14)
Subtotal	6,145	4,469	3,746	501	4,357	183	38	4	451	28	19,952
Non expenditure Transfers, Net:											
Actual Transfers, Budget Authority	(2)	28	31	(4)	(52)	(2)	I	I	4	I	I
Actual Transfers, Unobligation Balances	-	I	I	I	I	I	I	I	I	(E)	I
Permanently Not Available											
Cancellation of Expired and No-year Accounts	I	I	I	I	I	I	(2)	I	I	(91)	(63)
Total Budgetary Resources	\$6,295	\$4,643	\$3,885	\$508	\$4,641	\$209	\$38	\$618	\$455	\$217	\$21,509
Status of Budgetary Resources											
Obligations Incurred:											
Direct:	\$6,139	\$4,582	\$3,740	\$474	\$3,220	\$203	\$35	\$612	698\$	\$39	\$19,413
Reimbursable:	2	I	I	I	1,398	ı	-	4	-	75	1,481
Subtotal	6,141	4,582	3,740	474	4,618	203	36	616	370	114	20,894
Unobligated Balance:											
Apportioned	86	61	145	34	21	9	2	2	77	13	459
Unobligated Balance Not Available	56	1	1	1	2	1	1	1	8	06	156
Total Status of Budgetary Resources	\$6,295	\$4,643	\$3,885	\$208	\$4,641	\$209	\$38	\$618	\$455	\$217	\$21,509

	Space	Science	Exploration Mission	Aeronautics	Cross-Agency Mission	Education	Office of Inspector	American Recovery and	Construction and Environmental Compliance and Bestocation	ģ	F eter
Change in Obligated Balance				0000	Disciplina						
Unpaid Obligation Balance, Net, October 1	\$1,433	\$2,243	\$1,108	\$210	\$880	\$118	\$6	\$356	 \$	\$1,179	\$7,533
Obligations Incurred	6,141	4,582	3,740	474	4,618	203	36	616	370	114	20,894
Less: Gross Outlays	5,801	4,181	3,530	471	4,428	96	35	229	89	1,014	20,301
Less: Recoveries of Prior Year Unpaid Obligations	63	84	61	7	45	I	I	9	I	64	330
Change in Uncollected Customer Payments from Federal Sources	က	I	I	I	17	I	I	30	I	111	161
	\$1,713	\$2,560	\$1,257	\$206	\$1,042	\$225	\$7	\$319	\$305	\$326	\$7,957
Obligated Balance, Net, End of Period											
Unpaid Obligations	\$1,725	\$2,560	\$1,257	\$206	\$1,782	\$225	\$7	\$337	\$302	\$378	\$8,779
Less: Uncollected Customer Payments from Federal Sources	12	I	I	I	\$740	I	I	18	I	52	822
Total, Unpaid Obligated Balance, Net, End of Period	\$1,713	\$2,560	\$1,257	\$206	\$1,042	\$225	\$7	\$319	\$302	\$326	\$7,957
Outlays											
Net Outlays:											
Gross Outlays	\$5,801	\$4,181	\$3,530	\$471	\$4,428	96\$	\$35	229\$	\$68	\$1,014	\$20,301
Less: Offsetting Collections	-	I	I	I	1,180	I	2	34	ဇ	168	1,388
Less: Distributed Offsetting Receipts	I	I	I	I	1	I	I	1	I	80	80
Net Outlays	\$5,800	\$4,181	\$3,530	\$471	\$3,248	96\$	\$33	\$643	\$65	\$838	\$18,905

National Aeronautics and Space Administration Required Supplementary Information Combining Schedule of Budgetary Resources For the Fiscal Year Ended September 30, 2009 Restated

	Space	Science	Exploration	Aeronautics	Cross-Agency	Education	Office of	American Recovery		
(il Millotts of Dollats) Budgetary Resources	Operations	IN SOLO	INISSIM	IOI SERVICE SE	I Diocella	IDIO O O	iispectol dellera	and nemyesunem Act		10191
Unobligated Balance, Brought Forward, October 1	\$245		 \$	- ₩	 \$		\$3	l ₩	\$746	\$994
Recoveries of Prior Year Obligations	101	I	I	I	I	I	I	I	227	328
Budget Authority:										
Appropriation	5,765	4,503	3,506	200	3,306	169	34	1,002	-	18,786
Spending Authority from Offsetting Collections										
Earned										
Collected	162	I	I	I	466	I	I	I	481	1,109
Change in Receivable from Federal Sources	(27)	I	I	I	190	I	I	-	(23)	141
Change in Unfilled Orders										
Advance Received	(47)	I	I	I	137	I	I	1	(63)	27
Without Advance from Federal Sources	(96)	I	I	I	292	I	I	46	(352)	165
Subtotal	5,757	4,503	3,506	200	4,666	169	34	1,049	44	20,228
Nonexpenditure Transfers, Net:										
Actual Transfers, Budget Authority	I	I	I	I	I	I	I	I	I	I
Actual Transfers, Unobligation Balances	I	I	I	I	I	I	I	I	I	I
Permanently Not Available										
Cancellations of Expired and No-year Accounts	I	I	I	I	I	I	(F)	I	(48)	(49)
Enacted Reductions	I	I	I	I	I	I	I	I	I	I
Total Budgetary Resources	\$ 6,103	\$4,503	\$3,506	\$500	\$4,666	\$169	\$36	\$1,049	696\$	\$21,501
Status of Budgetary Resources										
Obligations Incurred:										
Direct:	\$5,969	\$4,441	\$3,459	\$496	\$3,245	\$141	\$33	\$393	\$529	\$18,706
Reimbursable:	43	I	I	I	1,130	I	-	48	253	1,475
Subtotal	6,012	4,441	3,459	496	4,375	141	34	441	782	20,181
Unobligated Balance:										
Apportioned	43	62	47	4	291	28	1	809	47	1,130
Subtotal	43	62	47	4	291	28	I	809	47	1,130
Unobligated Balance Not Available	48	I	I	I	I	I	2	I	140	190
Total Status of Budgetary Resources	\$6,103	\$4,503	\$3,506	\$500	\$4,666	\$169	\$36	\$1,049	696\$	\$21,501

	Space Operations	Science Mission	Exploration Mission	Aeronautics Mission	Cross-Agency Mission	Education Mission	Office of Inspector General	American Recovery and Reinvestment Act	Other	Total
Change in Obligated Balance										
Obligated Balance, Net, October 1	\$2,236	+	 ₩	- ₩	 #	+ ↔	\$3	↔	\$6,060	\$8,299
Obligations Incurred	6,012	4,441	3,459	496	4,375	141	34	441	782	20,181
Less: Gross Outlays	6,836	2,199	2,350	286	2,738	24	32	38	5,810	20,313
Less: Recoveries of Prior Year Unpaid Obligations	101	I	I	I	I	I	I	I	227	328
Change in Uncollected Customer Payments from Federal Sources	122	I	I	I	(757)	I	I	(47)	376	(306)
	\$1,433	\$2,242	\$1,109	\$210	\$880	\$117	\$5	\$356	\$1,181	\$7,533
Obligated Balance, Net, End of Period										
Unpaid Obligations	\$1,449	\$2,242	\$1,109	\$210	\$1,637	\$117	\$\$	\$404	\$1,343	\$8,516
Less: Uncollected Customer Payments from Federal Sources	16	I	I	I	757	I	I	48	162	883
Total, Unpaid Obligated Balance, Net, End of Period	\$1,433	\$2,242	\$1,109	\$210	\$880	\$117	\$2	\$356	\$1,181	\$7,533
Outlays										
Net Outlays:										
Gross Outlays	\$6,836	\$2,199	\$2,350	\$286	\$2,738	\$24	\$32	\$38	\$5,810	\$20,313
Less: Offsetting Collections	115	I	I	I	603	I	I	I	418	1,136
Less: Distributed Offsetting Receipts	I	I	I	I	I	I	I	I	00	00
Net Outlays	\$6,721	\$2,199	\$2,350	\$286	\$2,135	\$24	\$32	\$38	\$5,384	\$19,169

National Aeronautics and Space Administration Required Supplementary Information Fiscal Years 2010 and 2009

DEFERRED MAINTENANCE

NASA uses a Deferred Maintenance parametric estimating method (DM method) in order to conduct a consistent condition assessment of its facilities. This method measures NASA's current real property asset condition and documents real property deterioration. The DM method produces both a cost estimate of deferred maintenance, and a Facility Condition Index (FCI). Both measures are indicators of the overall condition of NASA's facilities. The facilities condition assessment methodology involves an independent, rapid visual assessment of nine different systems within each facility to include: structure, roof, exterior, interior finishes, HVAC, electrical, plumbing, conveyance, and program support equipment. The DM method is designed for application to a large population of facilities; results are not necessarily applicable for individual facilities or small populations of facilities. Under this methodology, NASA defines acceptable operating conditions in accordance with standards comparable to those used in private industry, and the aerospace industry.

There has been no significant change in our deferred maintenance estimate this year. The Agency-wide FCI, based on the ratings obtained during the condition assessment site visits, remains unchanged from the previous fiscal year. The FCI values for the majority of individual Centers and sites varied less than 0.5, validating the relative stability of the Centers and sites despite the continued aging and deterioration of older facilities. Evaluation of the facility conditions by building type (Real Property Classification Code/DM Category) indicates that the Agency continues to focus maintenance and repair on direct mission-related facilities. Higher condition ratings are reported for potable water facilities, launch, communication and tracking, and fuel facilities Agency-wide. Lower condition ratings occur for infrastructure, site related systems, and static test stands.

Deferred Maintenance Method	2	2010	2009
Facility Condition Index (FCI)		3.6	3.6
Target Facility Index		3.8	3.8
Deferred Maintenance Estimate	\$	2,553	\$ 2,547
(Active and Inactive Dollars)			
(In Millions of Dollars)			

Letter from the Inspector General on the Audit

National Aeronautics and Space Administration

Office of Inspector General Washington, DC 20546-0001



November 15, 2010

TO: Charles F. Bolden, Jr.

Administrator

Elizabeth Robinson Chief Financial Officer

FROM: Paul K. Martin

Inspector General

SUBJECT: Audit of the National Aeronautics and Space Administration's

Fiscal Year 2010 Financial Statements (Report No. IG-11-006;

Assignment No. A-10-005-00)

The Office of Inspector General contracted with the independent public accounting firm Ernst & Young LLP (EY) to audit NASA's financial statements in accordance with the Government Accountability Office's *Government Auditing Standards* and the Office of Management and Budget's Bulletin No. 07-04, "Audit Requirements for Federal Financial Statements," as amended.

The audit resulted in a qualified opinion on NASA's fiscal year (FY) 2010 financial statements (Enclosure 1) due to the valuation of property, plant, and equipment (PP&E) and materials in prior years and the possible effects to the current year statements of net cost and changes in net position. A qualified opinion means that except for the effects of the matter to which the qualification relates, the financial statements present fairly, in all material respects, the financial position and the results of the entity's operations in conformity with U.S. generally accepted accounting principles. The results of the FY 2010 audit were a notable improvement over FY 2009 when the Agency received a disclaimer of opinion due to continued weaknesses in internal controls over accounting for legacy PP&E.

EY also issued its reports on internal control and compliance with laws and regulations (Enclosures 2 and 3, respectively). For FY 2010, EY identified two significant deficiencies in financial reporting internal controls involving NASA's (1) controls over PP&E records maintained by contractors and (2) process for estimating environmental remediation costs. While the Agency has made significant progress addressing PP&E issues relating to the valuation and completeness of legacy assets, internal controls can still be enhanced for property managed by contractors and with respect to the Agency's potential environmental liabilities. During the audit, EY identified no instances of significant noncompliance with applicable laws and regulations.

In fulfilling our responsibilities under the Chief Financial Officers Act of 1990, we monitored the progress of the audit, reviewed EY's reports and related documentation, inquired of its representatives, and ensured that EY met contractual requirements. Our review was not intended to enable us to express, and we do not express, an opinion on NASA's financial statements; conclusions about the effectiveness of internal controls over financial reporting; or compliance with certain laws and regulations, including, but not limited to, the Federal Financial Management Improvement Act of 1996.

EY is responsible for each of the enclosed reports and the conclusions expressed therein. Our review, while still ongoing, disclosed no instances where EY did not comply in all material respects with the Government Accountability Office's *Government Auditing Standards*.

Please contact us if you have any questions about the enclosed reports.

3 Enclosures

Report of the Independent Auditors



Ernst & Young LLP 8484 Westpark Drive McLean, VA 22102

Tel: 703-747-1000 www.ey.com

Report of Independent Auditors

To the Administrator and the Inspector General of the National Aeronautics and Space Administration

We have audited the accompanying consolidated balance sheet of the National Aeronautics and Space Administration (NASA) as of September 30, 2010, and the related consolidated statements of net cost and changes in net position and the combined statement of budgetary resources for the fiscal year then ended. We were engaged to audit the consolidated balance sheet of NASA as of September 30, 2009, and the related consolidated statements of net cost and changes in net position and the combined statements of budgetary resources for the fiscal year then ended. These financial statements are the responsibility of NASA's management. Our responsibility is to express an opinion on these financial statements based on our audits.

Except as discussed in the following paragraph, we conducted our audit in accordance with auditing standards generally accepted in the United States, the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, and Office of Management and Budget (OMB) Bulletin No. 07-04, *Audit Requirements for Federal Financial Statements*, as amended. Those standards and bulletin require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of NASA's internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of NASA's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

During fiscal year 2009, NASA continued its focused efforts to resolve legacy issues identified in its financial management processes and systems. Although significant progress had been made, internal controls related to the accounting for property, plant and equipment (PP&E) and operating materials and supplies (OM&S) were determined to be ineffective in fiscal year 2009. As a result of these deficiencies in internal control, we were unable to obtain sufficient competent evidential support for the amounts presented in the consolidated balance sheet as of September 30, 2009, and the related consolidated statements of net cost and changes in net position and the combined statements of budgetary resources for the fiscal year then ended.

A member firm of Ernst & Young Global Limited



Report of Independent Auditors
Page 2

Furthermore, these scope limitations affected our ability to audit the following amounts in the accompanying FY 2010 consolidated statements of net costs and changes in net position: (i) the beginning balance of cumulative results of operations; (ii) the cumulative effect of a change in accounting principle for OM&S at October 1, 2009; and (iii) depreciation, PP&E and OM&S related amounts arising from fiscal year 2009 and prior activity, which enter into the determination of amounts included in the net cost of operations for fiscal year 2010.

Because of the matters discussed in the preceding paragraph, the scope of our work was not sufficient to enable us to express, and we do not express, an opinion on the consolidated balance sheet as of September 30, 2009, and the related consolidated statement of net cost, consolidated statement of changes in net position, and combined statement of budgetary resources for the fiscal year then ended.

In our opinion, the fiscal year 2010 financial statements referred to above present fairly, in all material respects, the financial position of NASA as of September 30, 2010, and its budgetary resources for the year then ended, and except for the effects of such adjustments, if any, on the consolidated net cost of operations and consolidated changes in net position of the matters described above in the third paragraph related to PP&E and OM&S balances, its consolidated net cost and consolidated changes in net position for the year ended September 30, 2010, in conformity with accounting principles generally accepted in the United States.

As discussed in Note 6 to the accompanying financial statements, NASA has elected to change its method of accounting for OM&S from the consumption method to the purchases method as allowed under Statement of Federal Financial Accounting Standards No. 3, Accounting for Inventory and Related Property, as of October 1, 2009.

In accordance with *Government Auditing Standards* and OMB Bulletin No. 07-04, *Audit Requirements for Federal Financial Statements*, as amended, we have also issued our reports dated November 15, 2010, on our consideration of NASA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, and other matters. The purpose of those reports is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing and not to provide an opinion on the internal control over financial reporting or on compliance. Those reports are an integral part of an audit performed in accordance with *Government Auditing Standards* and OMB Bulletin No. 07-04, as amended, and should be considered in assessing the results of our audit.



Report of Independent Auditors Page 3

Our audits were conducted for the purpose of forming an opinion on the 2010 and 2009 basic financial statements taken as a whole. The information presented in Management's Discussion and Analysis, required supplementary stewardship information, required supplementary information, and other accompanying information, is not a required part of the basic financial statements but is supplementary information required by OMB Circular No. A-136. The other accompanying information has not been subjected to the auditing procedures applied in our audit of the basic financial statements and, accordingly, we express no opinion on it. For the remaining information, we have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplementary information. However, we did not audit the information and express no opinion on it.

Ernst + Young LLP

November 15, 2010 McLean, VA

Report on Internal Control Over Financial Reporting Based on an Audit of the Financial Statements Performed in Accordance with *Government Auditing Standards*



Ernst & Young LLP 8484 Westpark Drive McLean, VA 22102

Tel: 703-747-1000 www.ey.com

Report on Internal Control Over Financial Reporting Based on an Audit of the Financial Statements Performed in Accordance with *Government Auditing Standards*

To the Administrator and the Inspector General of the National Aeronautics and Space Administration

We have audited the financial statements of the National Aeronautics and Space Administration (NASA or the Agency) as of and for the year ended September 30, 2010, and have issued our report thereon dated November 15, 2010. That report noted certain matters that resulted in a qualification of our opinion on the consolidated statements of net cost and changes in net position for the year ended September 30, 2010. Except for the matters discussed in the third paragraph of the Report of Independent Auditors, we conducted our audit in accordance with auditing standards generally accepted in the United States; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and Office of Management and Budget (OMB) Bulletin No. 07-04, *Audit Requirements for Federal Financial Statements*, as amended.

In planning and performing our audit, we considered NASA's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of NASA's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of NASA's internal control over financial reporting. We limited our internal control testing to those controls necessary to achieve the objectives described in the OMB Bulletin No. 07-04, as amended. We did not test all internal controls relevant to operating objectives as broadly defined by the Federal Managers' Financial Integrity Act of 1982 (FMFIA), such as those controls relevant to ensuring efficient operations.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control over financial reporting was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control that might be deficiencies, significant deficiencies or material weaknesses and, therefore, there can be no assurance that all deficiencies, significant deficiencies, or material weaknesses have been identified. We did not identify any deficiencies in internal control that we consider to be material weaknesses, as defined above. However, we identified certain deficiencies in internal control over financial reporting, described below, that we consider to be significant deficiencies in internal control over financial reporting.



Ernst & Young LLP 8484 Westpark Drive McLean, VA 22102

Tel: 703-747-1000 www.ev.com

A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. We consider the deficiencies related to Enhancements Needed for Controls over Property, Plant & Equipment Records Maintained by Contractors and Enhancements Needed for Recognition of Environmental Remediation Costs to be significant deficiencies.

Significant Deficiencies

Enhancements Needed for Controls over Property, Plant & Equipment Records Maintained by Contractors (new deficiency)

Prior-year audit reviews of NASA's legacy property, plant & equipment (PP&E) identified serious weaknesses in the design of internal controls over the completeness and accuracy of legacy assets, particularly in relation to the International Space Station (ISS) and Space Shuttles, which prevented material misstatements from being detected and corrected in a timely manner by NASA. During FY 2009 and FY 2010, NASA management undertook a systematic process to address the valuation and completeness issues related to the ISS and Space Shuttle assets as well as other PP&E in connection with the release of the Federal Accounting Standards Advisory Board (FASAB) Statement of Federal Financial Accounting Standards (SFFAS) No. 35, Estimating the Historical Cost of G-PP&E. This standard permits use of estimate approaches, which substantially improved NASA's ability to account for these assets in accordance with generally accepted accounting principles (GAAP) in FY 2010. Also assisting in remediation of this finding was that Space Shuttle assets have been fully depreciated in FY 2010 as they have reached the end of their estimated useful lives and this timing reasonably coincides with the Space Shuttle Transition and Retirement program. In addition, NASA reassessed and concluded that certain property classified as operating materials and supplies should be accounted for by the purchases method and not reflected on the NASA balance sheet as an asset. Adoption of changes in the internal control process associated with new contracts implemented in prior years also assisted in resolution of legacy property issues. Notwithstanding this significant progress, internal controls related to PP&E can continue to be enhanced, with particular emphasis on the approaches used to validate property managed by contractors. With many of the most intractable issues resolved through implementation of SFFAS No. 35, the remaining matters merit continued focus.

NASA is heavily dependent on activities at its contractors to recognize assets created at its contractors and the contractors' reporting of property transactions via the Contractor Held Asset Tracking System (CHATS) and quarterly reporting detail. All NASA contractors have their own procedures and systems for maintaining, valuing, inventorying and accounting for NASA property. Certain contractors report contractor-held property balances maintained on NASA's

A member firm of Ernst & Young Global Limited



behalf monthly/quarterly via CHATS. These transactions are then recorded in the Asset Accounting module of SAP by NASA to reflect the capitalized balances associated with contracts that have been determined to meet NASA's capitalization policy. The remaining contractors report their NASA-owned properties annually.

Over the past several years, NASA has developed a suite of overarching detect controls to assist in mitigating the risk of a material financial statement error in the property accounts. An example of these detect controls is the Continuous Monitoring Program conducted by center and agency-level personnel on a routine basis to assist NASA in identifying and correcting errors and discrepancies in a timely manner, as well as confirming that ongoing management reviews and validations of financial data and internal controls are taking place. Another example includes the validation procedures over property amounts reported by the contractors via CHATS as well as a reconciliation of CHATS property balances to those recorded by NASA in the Asset Accounting module of SAP, such that contracts and property deemed by NASA to be research and development are excluded from NASA's balance sheet. These overarching monitoring controls coupled with agency-wide budgetary controls were established to detect errors of significance to the financial statements. While relatively less direct NASA involvement has been devoted to ensuring that contractor controls are functioning as designed, the broad requirements for contractor property management systems are reflected in contract terms. NASA has some visibility into how individual contractors design and operate their property management systems through the Defense Contract Management Agency (DCMA) reviews and the activities of property administrators, as well as through limited Defense Contract Audit Agency (DCAA) reviews. The timing and scope of these reviews do not always facilitate timely recognition of issues, or provide NASA with a basis of reliance on the procedures absent further efforts by NASA.

Most notable of NASA's contractor-held related property is the ISS, which at September 30, 2010, represented approximately \$6.3 billion or 66% of NASA's total property balance. The majority of the ISS costs capitalized is derived from one contractor. During the current fiscal year, this contractor reported inaccuracies in its quarterly submissions of data to NASA via CHATS. Specifically, in the second quarter reporting submission, upon delivery of the final ISS components to NASA (the United States On-Orbit Segment), the contractor reported a decrease in its work-in-process, but did not appropriately reflect a corresponding increase in its other property balances as submitted to NASA. NASA management discovered and questioned the contractor regarding these unusual relationships as part of their validation and monitoring process, and elected to not record changes to their property records in the general ledger for the questioned items, pending further review. In the contractor's third quarter reporting submission, the contractor reported a \$1.1 billion adjustment. NASA was unaware of the details and justification for this adjustment at the time of submission. Again, NASA elected to not record changes to their property records pending further review and validation with the contractor. During the fourth quarter, NASA recorded a \$644 million adjustment to account for the second quarter error and NASA management invalidated the



Report on Internal Control Page 4

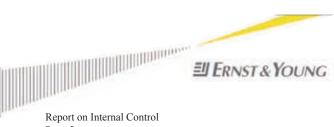
\$1.1 billion adjustment reported by the contractor in the third quarter. The process NASA used to correct such items validates the effectiveness of some of the financial management review processes to detect errors of financial statement significance. However, identification of a further potential adjustment initially proposed by a contractor late in FY 2010 and ultimately not made, highlights the need for NASA to continue to work with contractors to develop robust controls to prevent errors in the underlying records and the initial submission of data from its contractors, such that items of significance are agreed to by NASA and the contractors prior to submission in CHATS and can be recorded by NASA in a timely manner to facilitate the preparation of quarterly financial statements and other reports.

At our request, NASA performed high-level analytic reviews and then deconstructed FY 2010 property-related activity and critically assessed whether the interrelationships within the recorded amounts comported with management's understanding of expected results based on the activities executed during the year, which might reasonably have been expected to give rise to accounting entries. This effort, which highlighted a number of anomalies, including previously unexplained variations in depreciation and accumulated depreciation amounts, and differences between estimates of contractor-held property activity reflected in accrual estimates and actual amounts as reflected in subsequent contractor reporting, was useful in correcting misstatements before issuance of the FY 2010 financial statements and in assessing the largely offsetting impacts of differences on prior reported amounts. The interactions with Centers, contractors and property management personnel required to understand the flows reflected were useful in enhancing NASA's understanding of its recorded amounts and proposed adjustments. These efforts were complicated by NASA processes which do not facilitate identification of net property addition or deletion activity, with transfers between line item classifications, between contractors, and between contractors and the government each recorded in the detail records. Customized reporting is not yet sufficiently refined to facilitate the analysis. Management acknowledges that these overarching analytical techniques are under development, and will be critical aspects of NASA's ability to report and interpret property-related activities.

Recommendation

Based on the significant reliance placed on contractor systems, we suggest that management revisit the extent to which such systems merit improvement in controls and revisit the extent of independent testing performed to assist in reducing the possibility that errors that are other than inconsequential may occur and not be detected by the system of overarching detect controls NASA has put in place.

A member firm of Ernst & Young Global Limited



Page 5

We recommend that NASA:

- 1. Continue to enhance its understanding of the design, implementation and functioning of control activities in place at its contractors and assess the extent to which further refinement is needed to assist in preventing errors or their early detection and correction within the contractors.
- 2. Revisit the extent of evaluation and testing of property-related systems under the OMB Circular No. A-123 process, DCAA activities or potentially other constructs, including assessing the merits of obtaining more timely and comprehensive assurance regarding contractor systems of internal control in light of the significance of the amounts processed in relation to the financial statements and assets of NASA.
- 3. Develop preventative controls with its contractors on items of significance prior to the contractors' submissions of property data to NASA. Co-developing thresholds for validation and concurrence prior to the submission process with the contractor is key to the development of an effective control.
- 4. Continue to refine the PP&E analytic tools developed late in FY 2010 to assist in conducting reasonableness reviews and further assessing the fair presentation of NASA property activity on at least a quarterly basis. This effort should include developing customized reporting tools to access and summarize in readily interpreted formats the information reflected in NASA's property records.

Enhancements Needed for Recognition of Environmental Remediation Costs (modified repeat deficiency)

NASA's environmental liability is estimated at \$1,041 million as of September 30, 2010, including the estimated environmental cleanup cost associated with PP&E. We noted that the NASA Office of the Chief Financial Officer (OCFO) and the Office of Strategic Infrastructure (OSI) invested resources to enhance internal controls for its contingent environmental remediation liabilities. The joint review process, a key control, further matured in FY 2010 by improving training and consistency to the environmental remediation estimation process. NASA also retained a third-party consultant to develop an estimate of the environmental cleanup costs for PP&E not related to the Space Shuttle Program (SSP). While NASA continues to make progress, we noted weaknesses in NASA's ability to generate a consistent estimate of its contingent environmental remediation costs and its environmental cleanup costs associated with PP&E. Specifically:

1. NASA lacks an ongoing validation program to assess the accuracy of remedial estimates generated through the use of the Integrated Data Evaluation and Analysis Library (IDEAL) NASA uses algorithms in the IDEAL tool to develop remediation estimates when detailed user-defined engineering estimates are not available. The algorithms were checked



Report on Internal Control Page 6

against actual results in a series of studies conducted in 2007 and 2008. Differences were noted in these studies and recommendations were made to improve the tool's performance. However, NASA has not developed and implemented a process to periodically validate and update the model based on actual costs.

- 2. Reasonably possible and estimable and reasonably possible and non-estimable disclosures can be enhanced by the joint review process: The joint review process does not consistently include documentation of the review and classification of costs other than those that are probable and estimable.
- 3. SFFAS No. 6 costs are categorized in SFFAS No. 5 data sets: In FY 2009, NASA updated its environmental liability process to differentiate those liabilities that are remedial in nature and recognized in accordance with SFFAS No. 5 Accounting for Liabilities of the Federal Government, and those environmental cleanup liabilities that are known when the asset is placed in service and recognized in accordance with SFFAS No. 6. Certain landfill operations, storage tanks and the decommissioning of Plum Brook nuclear reactor are environmental cleanup and closure obligations. NASA has not reclassified these estimates, in some cases because the cleanup has historically been included in the SFFAS No. 5 environmental liability but has elements of a SFFAS No. 6 liability as well.
- 4. Environmental control processes are not updated in a timely manner: NASA Procedural Requirement (NPR) 8590.1, NASA Environmental Compliance and Restoration (ECR) Program; (effective June 14, 2007 and updated in 2010) does not reference the joint process review, a key control in the review of unfunded environmental liabilities. The joint process reviews have been a critical control in the annual estimation process since FY 2008. Furthermore, NPR 9260.1 Revenue, Unfunded Liabilities and Other Liabilities (effective September 30, 2008) does not capture the process used to gather PP&E cleanup costs related to the Space Shuttle or other applicable programs.

The procedures engaged in by the Space Operations Mission Directorate (SOMD) to develop the estimate of SSP PP&E cleanup costs are based on efforts necessary to adhere to annual planning, programming, budgeting and execution (PPBE) requirements. These steps and support are then modified by the SOMD to project probable and reasonably possible environmental liabilities used for financial reporting. Current NASA guidance does not specify the actions to be taken by OCFO to review, recognize, or record the estimate or identify control activities or procedures to aid in ensuring that the recorded amounts are appropriate.

5. NASA has not completed its development of procedures or estimates to record and disclose asbestos cleanup costs. During our testing at the Marshall Space Flight Center (MSFC) we were made aware of an Asbestos Information System database that housed information on both friable and non-friable asbestos located in buildings and equipment throughout MSFC that did not pose an immediate health hazard. NASA's management has stated that asbestos cleanup costs associated with friable asbestos that constitutes an immediate health hazard.



Report on Internal Control Page 7

are recognized when identified. NASA indicated that costs for the removal of friable and nonfriable asbestos that does not pose an immediate health hazard but that will be removed in connection with a future demolition or modification have not been recorded. NASA indicated that it will be required to recognize those costs in FY 2012 under applicable guidance. The applicable FASAB guidance deferring recognition of certain asbestos costs that do not pose an immediate health hazard in connection with implementation of SFFAS No. 6 acknowledges the difficulties agencies may have in developing comprehensive inventories of such materials and cleanup estimates. Further refinement of NASA processes in these areas may be required to meet the objectives of SFFAS No. 6.

Recommendation

Notwithstanding that progress has been made during FY 2010, we suggest that management revisit the internal controls related to NASA's ability to generate a consistent estimate of its contingent environmental remediation costs and its environmental cleanup costs associated with PP&E to assist in reducing the possibility that errors that are other than inconsequential may occur and not be detected by the system of overarching detect controls NASA has put in place.

We recommend that NASA:

- 1. Complete the development and implementation of the application controls that ensure the accuracy of the output (e.g., cost tables, markups, and contingencies). This includes completing and documenting the verification of the IDEAL parametric model output and aggregation functions to validate the reliability of the output.
- 2. Amend the joint review process documentation to require the classification of costs that are other than probable and estimable into assigned categories (e.g., probable but not-estimable, reasonably possible and estimable, reasonably possible but not estimable, and remote) and retain documentation related to significant judgments regarding responsible parties, classification and components of the estimates.
- 3. Reclassify environmental liabilities that are managed as contingent environmental liabilities in accordance with SFFAS No. 5 and that are more appropriately managed as environmental cleanup costs in accordance with SFFAS No. 6.
- 4. Update or develop a separate process for NPR 8590.1, *NASA Environmental Compliance and Restoration (ECR) Program* to reference the joint process review and NPR 9260.1, *Revenue, Unfunded Liabilities and Other Liabilities*, with the process to be developed as pertaining to PP&E cleanup estimation procedures for program transition and retirement efforts, or craft a separate process to capture these concerns.
- 5. Implement preventative actions (i.e., controls) to address policies, procedures and guidance related to the SSP PP&E cleanup estimation process. Specifically, assign roles and



Report on Internal Control Page 8

- responsibilities for implementation of completeness and valuation testing procedures to relevant OSI and OCFO personnel. Estimation procedures should also be compared to assess compliance with SFFAS No. 6, Technical Release 2 and Technical Release 11 guidance.
- 6. Facilitate the development of a procedure, in conjunction with other appropriate NASA entities (e.g., Environmental Management Division, Health and Safety, Facilities Management), to identify, estimate and document friable and nonfriable asbestos abatement costs in circumstances in which an immediate health hazard does not exist in accordance with the applicable FASAB guidance prior to its effective date.

Other Matters

STATUS OF PRIOR-YEAR FINDINGS

In the reports on the results of the FY 2009 audit of the NASA's financial statements, a number of issues were raised relating to internal control. The chart below summarizes the current status of the prior year items:

	Material Weakness	
Issue Area	Summary Control Issue	FY 2010 Status
Enhancements Needed for Controls over Legacy PP&E and Materials Contracts, But SFFAS No. 35 Adoption May Aid In Resolving This Longstanding Issue	noted in prior-year audit reports continue to challenge the Agency,	Substantially remediated. New observation related to SFFAS No. 35 implementation and contractor-held property reflected herein as a significant deficiency.

A member firm of Ernst & Young Global Limited



Report on Internal Control Page 9

	Significant Deficiencies	
Issue Area	Summary Control Issue	FY 2010 Status
Processes in Estimating NASA's Environmental Liability Continue to Require Enhancement	 Design and implementation of controls for NASA's IDEAL estimating software have not been completed. Certain controls surrounding the process to value unfunded e n v i r o n m e n t a l liabilities need further enhancements. 	Significant progress has been noted; but deficiencies still remain as reported as a significant deficiency herein.
Financial Management Systems Not in Substantial Compliance with Federal Financial Management Improvement Act	 Real property system not integrated with the Core Financial Module Issues related to IT access and change management identified NASA did not meet certain requirements to ensure compliance with federal accounting standards. 	Substantially remediated. Significant improvements noted with the integration of the real property system to the core financial module and the implementation of SFFAS No. 35 to overcome certain issues within the property area. Certain less significant matters and interrelationships with the work of other auditors have been brought to the attention of management.

* * * * *

We have reviewed our findings and recommendations with NASA management. Management generally concurs with our findings and recommendations and will provide a corrective action plan to address the findings identified in this report. We did not audit NASA's response, and accordingly, we express no opinion on it.



Report on Internal Control Page 10

This report is intended solely for the information and use of the management and the Office of Inspector General of NASA, OMB, the Government Accountability Office and Congress, and is not intended to be and should not be used by anyone other than these specified parties.

Ernst + Young LLP

November 15, 2010 McLean, VA

Report on Compliance and Other Matters Based on an Audit of the Financial Statements Performed in Accordance with *Government Auditing Standards*



Ernst & Young LLP 8484 Westpark Drive McLean, VA 22102

Tel: 703-747-1000 www.ey.com

Report on Compliance and Other Matters Based on an Audit of the Financial Statements Performed in Accordance with *Government Auditing Standards*

To the Administrator and the Inspector General of the National Aeronautics and Space Administration

We have audited the financial statements of the National Aeronautics and Space Administration (NASA) as of and for the year ended September 30, 2010, and have issued our report thereon dated November 15, 2010. That report noted certain matters that resulted in a qualification of our opinion on the consolidated statements of net cost and changes in net position for the year ended September 30, 2010. Except for the matters discussed in the third paragraph of the Report of Independent Auditors, we conducted our audit in accordance with auditing standards generally accepted in the United States, the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, and Office of Management and Budget (OMB) Bulletin No. 07-04, *Audit Requirements for Federal Financial Statements*, as amended.

As part of obtaining reasonable assurance about whether NASA's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws and regulations, noncompliance with which could have a direct and material effect on the determination of financial statement amounts, and certain other laws and regulations specified in OMB Bulletin No. 07-04, as amended, including the requirements referred to in the Federal Financial Management Improvement Act of 1996. We limited our tests of compliance to these provisions and we did not test compliance with all laws and regulations applicable to NASA.

The results of our tests disclosed no instances of noncompliance with the laws and regulations discussed in the preceding paragraph or other matters that are required to be reported under *Government Auditing Standards* or OMB Bulletin No. 07-04, as amended.

Providing an opinion on compliance with certain provisions of laws and regulations was not an objective of our audit and, accordingly, we do not express such an opinion.

This report is intended solely for the information and use of management and the Office of Inspector General of NASA, OMB, the Government Accountability Office, and Congress, and is not intended to be and should not be used by anyone other than these specified parties.

Ernst + Young LLP

November 15, 2010 McLean, VA

Management's Response to Independent Auditor's Report for Fiscal Year 2010

National Aeronautics and Space Administration Headquarters Washington, DC 20546-0001



November

2010

15.

Reply to Attn of:

Office of the Chief Financial Officer

TO: Inspector General

FROM: Deputy Chief Financial Officer

SUBJECT: Management Response to Audit Report of Independent Auditors

I am pleased to respond to your audit report on the Consolidated Financial Statements of the National Aeronautics and Space Administration (NASA) for FY 2010 and FY 2009. NASA's efforts and achievements toward improved financial management are clearly reflected in the audit opinion. For the first time since 2002, NASA has earned an unqualified opinion with no material weaknesses on its Consolidated Balance Sheet and Combined Statement of Budgetary Resources. I am confident that the same will be said for our Consolidated Statements of Net Cost and Changes in Net Position next year.

I am particularly gratified to note NASA's resolution of the prior year material weakness in internal controls related to the Agency's legacy Property, Plant, and Equipment (PP&E). This is a direct result of the commitment and effort to financial management by the entire Agency and a clear indication of the progress that the Agency continues to make toward a fully unqualified audit opinion. As a result of successful efforts to integrate property information with the financial accounting system, NASA is now substantially compliant with the Federal Financial Management Improvement Act.

I understand that the independent auditors identified two significant deficiencies, one related to controls over PP&E records maintained by contractors and the other related to the need for enhancements over NASA's recognition of environmental remediation costs. The Agency is committed to working collaboratively, with the Office of Inspector General (OIG) and the independent audit firm in resolving these deficiencies as quickly as possible.

I appreciate the efforts of the OIG and of the independent auditors under contract to the OIG to audit NASA's financial statements. Please convey my appreciation and thanks to your staff for the professionalism and cooperation exhibited during this audit.

Terry Bowie

Keny Sow Ce



Credit: NASA

This Hubble photo is but a small portion of one of the largest seen star-birth regions in the galaxy, the Carina Nebula. Towers of cool hydrogen laced with dust rise from the wall of the nebula. Captured here are the top of a three-light-year-tall pillar of gas and the dust that is being eaten away by the brilliant light from nearby bright stars. The pillar also is being pushed apart from within, as infant stars buried inside it fire off jets of gas that can be seen streaming from towering peaks like arrows sailing through the air.

Center Information

NASA Headquarters (HQ)

Washington, DC 20546-0001 (202) 358-0000 www.nasa.gov/centers/hg/home/index.html

NASA Ames Research Center (ARC)

Moffett Field, CA 94035-1000 (650) 604-5000

www.nasa.gov/centers/ames/home/index.html

NASA Dryden Flight Research Center (DFRC)

P.O. Box 273 Edwards, CA 93523-0273 (661) 276-3311

8800 Greenbelt Road

www.nasa.gov/centers/dryden/home/index.html

NASA John H. Glenn Research Center at Lewis Field (GRC)

21000 Brookpark Road Cleveland, OH 44135-3191 (216) 433-4000 www.nasa.gov/centers/glenn/home/index.html

NASA Goddard Space Flight Center (GSFC)

Greenbelt, MD 20771-0001 (301) 286-2000 www.nasa.gov/centers/goddard/home/index.html

NASA Jet Propulsion Laboratory (JPL)

4800 Oak Grove Drive Pasadena, CA 91109-8099 (818) 354-4321 www.nasa.gov/centers/jpl/home/index.html

NASA Lyndon B. Johnson Space Center (JSC)

Houston, TX 77058-3696 (281) 483-0123

www.nasa.gov/centers/johnson/home/index.html

NASA John F. Kennedy Space Center (KSC)

Kennedy Space Center, FL 32899-0001 (321) 867-5000

www.nasa.gov/centers/kennedy/home/index.html

NASA Langley Research Center (LaRC)

Hampton, VA 23681-2199 (757) 864-1000 www.nasa.gov/centers/langley/home/index.html

NASA George C. Marshall Space Flight Center (MSFC)

Huntsville, AL 35812-0001 (265) 544-2121

www.nasa.gov/centers/marshall/home/index.html

NASA John C. Stennis Space Center (SSC)

Stennis Space Center, MS 39529-6000 (228) 688-2211

www.nasa.gov/centers/stennis/home/index.html

Photo back cover: Backdropped by Earth's horizon and the blackness of space, the International Space Station is featured in this image photographed by an STS-131 crewmember after Space Shuttle *Discovery* began to undock and separate from the Station. (Credit: NASA)



NASA Headquarters Washington, DC 20546

NP-2010-11-690-HQ

www.nasa.gov